The CANADA ROUND

John McCallum
and Chris Green

with Mario Polèse, Pierre Fortin,
François Vaillancourt, Pierre-Paul Proulx,
and René Simard

PARTING AS FRIENDS

The Economic Consequences for Quebec

A Series on the Economics of the Breakup of Confederation

C.D. Howe Institute

C.D. Howe Institute

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C.D. Howe Institute
125 Adelaide Street East
Toronto, Ontario
M5C 1L7
(tel.. 416-865-1904; fax: 416-865-1866)

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John McCallum, Series Editor

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Foreword

Canada appears poised to embark on an historic political reconfiguration. It is essential that this process be undertaken with a clear and widely diffused understanding of the well-spring of Canadians' economic prosperity.

It is with that in mind that the C.D. Howe Institute presents this series of monographs entitled *The Canada Round*. The series assembles the work of many of Canada's leading economic and political analysts. The monographs are organized into two groups. The first group, called "The Economics of Constitutional Renewal", rests on the assumption of renewed federalism and is organized around economic themes. It examines the economic goals that Canadians have set for themselves, as well as the means of achieving them and the influence of alternative constitutional structures.

The second group of studies, called "The Economics of the Breakup of Confederation", examines the economic consequences of Quebec independence for both Quebec and the rest of Canada. A unique feature of the "Breakup" studies is that they are integrated with the research that has already been carried out by Quebec's Bélanger-Campeau Commission. Where appropriate, each of the studies in this group includes a summary of the relevant analysis by the Bélanger-Campeau Commission, contributions by experts from across Canada, as well as shorter critiques or replies. This format, we believe, will help to pierce Canada's "several solitudes" and create a pan-Canadian meeting of minds.

The Canada Round is not intended to alarm or frighten — the process of collective political definition in this country will turn on more than simply questions of dollars and cents. And, as these monographs will reveal, economics rarely produces an open-and-shut case as to the superiority of one possible set of rules over another. Even if it could do this, it would be unwise to assume that

economic analysis alone could change the minds of those who are already committed to a particular vision of the political future.

It is equally clear, however, that Canadians are now seeking a greater understanding of the links between the economy, the Constitution, and legal and political life. A significant reform of the Constitution will influence the economy, in some cases for the better; a rending of the Constitution under conditions of acrimony will almost certainly damage it. Thus, the purpose of the series is to help Canadians think constructively about the benefits and costs of alternative constitutional designs.

Underlying the series is a focus on the economic well-being of Canadians, now and in the future. To best insure this well-being over the short run, Canada needs calm, open negotiations in which efforts are made to understand and incorporate the aspirations of all the participants. This series of monographs is dedicated to that effort.

John McCallum, the series editor and Chairman of the Department of Economics at McGill University, organized the intellectual input. Within the C.D. Howe Institute, David Brown, Senior Policy Analyst, played a coordinating role. This fifth monograph in the series was copy edited by Barry A. Norris and desktop published by Brenda Palmer. As with all C.D. Howe Institute publications, the analysis and views presented here are the responsibility of the author and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

Thomas E. Kierans
President and
Chief Executive Officer

The Study in Brief

This volume consists of a study by Chris Green and myself, as well as short comments by five fellow Quebecers: Pierre Fortin, Mario Polèse, Pierre-Paul Proulx, René Simard, and François Vaillancourt. As series editor of "The Canada Round", I approached five individuals whose expertise on the various themes of our study was, I thought, second to none in Quebec. Whether or not their frank and often critical remarks are seen as damaging to the study, they certainly enhance the credibility of the C.D. Howe Institute's commitment to foster an honest debate.

What are the economic consequences for Quebec of a "friendly breakup"?* While the study assumes that Quebec and "the Rest of Canada" (ROC) would act in their economic interests and bargain hard, it also assumes that negotiations on key issues would be concluded quickly and that the transition to sovereignty would proceed relatively smoothly. It should be stressed that we, as authors, do not make these assumptions because we think that a friendly breakup is the most likely outcome. On the contrary, there is scope for considerable acrimony in the sensitive areas of territory, debt sharing, and currency. Rather, we maintain:

> if we are correct in arguing that even a friendly separation would be costly, then it surely follows that things could only be worse if — in ways that are impossible to know in advance — the environment turned out to be hostile and acrimonious.

The study deals mainly with three issues: the rise and subsequent relative economic decline of Montreal, the short-run or first-round effects of a friendly breakup, and the longer-run or second-round effects of that event.

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* This study does not deal with the costs to "the Rest of Canada". These costs are implicit in much of the study, but they are dealt with explicitly only in a footnote in Chapter 9.

Montreal

In the years immediately following the election of the Parti Québécois government in 1976, there was a large and possibly permanent jump in the gap between the unemployment rates in Montreal and Toronto (see Figure 2, Chapter 5). This occurred in spite of a surge of public-sector spending in Quebec between the mid-1970s and the mid-1980s (see Figure 4, Chapter 5). While the Montreal economy was able to take in its stride the gradual changes coming from Quebec's "Quiet Revolution", this was not the case for the much more abrupt shock arising from the first real threat of Quebec separation, which occurred during the 1976–80 period. While a modern economy is usually able to absorb gradual change without major dislocation, abrupt and concentrated shocks are much less digestible and, as suggested by the experience of 1976–80, can result in prolonged and protracted periods of high unemployment. If Quebec were to secede in the 1990s, the resulting economic shock could not be cushioned by a repetition of the surge in government spending that occurred during this earlier period. Moreover, if Quebec separation led to a further ratcheting up of the unemployment rate, the burden of such a development would fall primarily on the least privileged and least mobile members of Quebec society.

First-Round Effects of Quebec Separation

The study begins with a description of 12 vulnerable areas, including the Quebec dairy industry, Montreal's remaining head offices, the city of Hull, and the clothing and textiles industries (see Table 1, Chapter 6 for a complete listing). This is followed by an assessment of the implications of Quebec separation for the Quebec government budget over the first five years of independence. We present a federalist base case that consolidates the Quebec government deficit with Quebec's share of future federal deficits (as forecast by the federal Department of Finance). We then estimate the impact of Quebec separation by making assumptions in five key areas: the division of federal assets and debt, out-migration, short-run disloca-

tion resulting from separation, and a risk premium on the interest rate that would have to be paid on government debt. While the assumptions in these areas may be relatively optimistic, the results are presented in a way that allows the reader to calculate the implications of different assumptions.

The main implications of this exercise are set out in two figures (5 and 6) presented in Chapter 6. Taking 1990 as the base year, the effect of sovereignty on Quebec's fiscal imbalance is to add to the underlying deficit amounts ranging from $4.5 billion in Year 1 to $10.0 billion in Year 5. As a result, Quebec's deficit in each of the first five years would rise to the $14–17 billion range, while the projected debt of the new country rises steadily to reach 97 percent of GDP in Year 5.

Numbers of this size would clearly be unacceptable both to the government of Quebec and to Quebec's creditors in international money markets. The government would have no choice but to enact substantial expenditure cuts or tax increases — or a combination of both. A hypothetical "austerity package" (see Table 3, Chapter 6) illustrates the order of magnitude of the cuts that would be required to put the budget on a sound footing and to satisfy Quebec's creditors in international money markets. The package contains spending cuts of 10–15 percent, a 5 percent "downsizing" of the public sector, and a 15 percent increase in all major taxes.

While we acknowledge several times that there is considerable room for debate on some of our assumptions, we suggest that we are, if anything, erring on the side of optimism:

> Recall that there is no acrimony in this story. We have assumed no barriers to trade with either the United States or...ROC. We have generated no credit crunch or foreign-exchange crisis or major drop in investment, no mass exodus of people and capital from Quebec, no political crisis over territory. By and large, our assumed economic shocks lie within the range of recent experience — even though the political shock we are considering does not.

Second-Round Effects of Quebec Separation

Analyzing longer-run effects becomes both more difficult and more speculative. It is necessary to turn to the study of economic growth

and development and the reasons for the rise and fall of nations, regions, and cities. It is also necessary to study a recent and controversial literature that asks whether the effects of shocks to unemployment and production are permanent or temporary. We argue that since economists cannot even agree on whether standard kinds of economic shocks have permanent or temporary effects, they cannot possibly be sure whether the breakup of a country would have temporary or permanent effects on the economy.

Despite these reservations, we argue that the first-round effects just described — higher taxes, out-migration, reduced public services — *could* set in motion an unraveling process with longer-run negative effects on the Quebec economy. The process could feed on itself as higher taxes induce further out-migration, further reductions in investment and the tax base, and, hence, further rounds of higher taxes and out-migration (see Figure 7, Chapter 7). Moreover, it cannot be assumed that Quebec would be immune from this process simply because most Quebecers speak French. Quebecers and Quebec-based institutions that are leaders in their field are a part of the worldwide trend toward more international interaction and reduced national and linguistic barriers.

On the other hand, several factors could work to offset these negative influences. We discuss some of these factors — the capacity to control government deficits, the waste associated with overlapping jurisdictions, and policy coherence — in the last substantive chapter of the study.

The Critics

It is questionable practice for an author to summarize the statements of critics, especially when forced to compress the views of five individuals into a few hundred words. With that caveat, I offer a few brief lines on each discussant, followed by a longer description of a "counter-scenario" offered by Mario Polèse.

Pierre Fortin accepts our methodology on budgetary analysis but not necessarily all the numbers. On the other hand, he is less

enthusiastic about our "unraveling" story, arguing that "economic progress is often stimulated, not arrested, by adversity, threat, and challenge." Mario Polèse argues that Quebec, and especially Montreal, is already in the process of paying a good part of the price of separation, whether or not that event occurs. Especially if separation is "friendly", *additional* out-migration or loss of head offices might be negligible in comparison with the most likely alternative. Both Fortin and Polèse suggest that separation might be preferable to likely alternatives involving a forced reconciliation and continuing uncertainty regarding Quebec's future constitutional status.

Pierre-Paul Proulx criticizes us for insufficient emphasis on the declining importance of political boundaries, the increasingly north-south orientation of provincial economies, and the resulting decline in the rate of return from efforts to reduce interprovincial — as opposed to international — trade barriers. He also criticizes the absence of a formal econometric model and what he perceives as our lack of historical perspective, and he outlines his own approach to the "location of economic activity in an increasingly continentalized and globalized economy."

René Simard accepts our argument that linguistic barriers in Quebec's "centers of excellence" are becoming less important and that such centers could, in theory, be subject to unraveling effects. He suggests, however, that Montreal will remain one of the leading cities of the world in terms of its quality of life (as stated in a recent United Nations' study), whatever Quebec's political status. Moreover, the same arguments that are applied to Quebec could also be applied to ROC.

François Vaillancourt criticizes us for our "gloom and doom view," arguing that major benefits have arisen from a partial "reconquest" of the Quebec economy by francophones over the 1976–85 period and that further benefits would accrue to Quebec francophones in the event of separation. Chief among these are the cheaper housing that would be available to francophones as a result of an anglophone exodus and, perhaps, a higher long-run growth rate due to "francophones' full control of internal economic variables."

Mario Polèse ends his comment with an appeal for greater humility by economists. He illustrates this appeal with a vision of the long-run effects of Quebec separation that is very different from the unraveling story presented in the study. Polèse's point is not to choose between the two cases, but to argue that economists simply do not have the scientific knowledge to offer *any* professional opinion as to which of the two scenarios (or any other scenario) is the more likely.

Under Polèse's counter-scenario, it is ROC that falls into a state of instability following Quebec separation: continuing constitutional crises, conflicts over regional disparities, threats by more provinces to secede, conflict over Winnipeg versus Ottawa as the national capital, rising anti-Americanism, and so on. Quebec, on the other hand, after a short transitional period, becomes a democratic, modern, moderately pro-business state. Linguistic tensions are a thing of the past. While Toronto languishes, Montreal becomes a magnet for young scientists and researchers in search of a milieu that is both different and dynamic.

Conclusion

It seems, then, that while different economists may come up with different numbers in estimating the *transition costs* of Quebec separation, at least we can agree on methodology and a basic approach. On the other hand, once economists dare to consider the *long-run* effects of the breakup of a country, they are entering a world where anything can happen. It is an unfamiliar world of scenarios and counter-scenarios, dreams and nightmares, theories and counter-theories. Notwithstanding the legitimate demands of fellow citizens for reliable predictions, this is a world that no one can predict with any degree of confidence.

John McCallum
Series Editor

Preface

A Message to Fellow Quebecers

For us, this study is more than just a routine academic exercise. The subject evokes great emotions, and it has obvious political implications. For these reasons, we have taken special care in making our assumptions explicit, and we are also pleased that the volume incorporates the comments and critiques of five respected francophone experts. Even so, when two Quebec anglophone economists conclude that sovereignty would be bad for the Quebec economy, it should come as no surprise if many Quebec readers are skeptical. It seems appropriate, therefore, for us to make our positions clear from the outset.

We believe that Quebec is a distinct society and should be so recognized. We agree with Pierre Fortin when he writes that the French fact in North America makes Canada a different and more exciting place and that all Canadians should feel very positively about nurturing this fact. We have never, in all our years in Quebec, felt uncomfortable in a society whose main language and culture are not our own. On the other hand, and in common with almost all Quebec anglophones, we feel an attachment to Canada. We would be saddened if Quebec were to declare sovereignty and separate from Canada. Also, and especially if our analysis is correct, Quebec sovereignty would almost certainly be contrary to our own interests.

Having indicated our biases and declared our interests, we leave it to the individual reader and to our fellow economists to assess the quality of our analysis.

John McCallum and Chris Green
Montreal, September 1991

Parting as Friends:

The Economic Consequences for Quebec

John McCallum
and Chris Green

Chapter 1

Introduction

This study analyzes the economic consequences of a friendly, or at least nonacrimonious, separation of Quebec from "the Rest of Canada" (ROC).[1] Both parties, it is assumed, would seek to maintain mutually advantageous economic relations. ROC would not be willing to subsidize Quebec, but neither would it do anything out of spite. The central conclusion is that a friendly separation would involve major short-run and long-run costs. While both Quebec and ROC would bear these costs, the main focus of this study is on the costs to Quebec.

Although we do not question the viability of a sovereign Quebec, we do question the usefulness of viability as a criterion for choice. Taiwan, for example, has a viable economy in the sense that it seems to function rather well, but the average Taiwanese is much poorer than the average Quebecer. An assessment of the economics of Quebec sovereignty, therefore, should be on the basis of cost, not viability.

The study begins, in Chapter 2, with a discussion of the likelihood of separation. Despite the apparent calm during the summer months of 1991, the barriers to an agreement remain formidable, and the possibility of Quebec separation must be taken seriously. While our main focus is on a friendly separation, Chapter 3 provides a short discussion of the question of acrimony. We stress the link between the likely degree of acrimony and the extent to which the process of

1 Our thanks to the many people, in addition to our formal discussants, who provided valuable comments, and especially to David Brown, Marcel Côté, Claude Forget, Claude Montmarquette, Bill Robson, Daniel Schwanen, and our colleagues at McGill University.

Quebec separation is perceived as legitimate. We consider a range of possible outcomes in the potentially divisive areas of territory, debt, and currency, but we conclude that there is no firm basis for predicting the degree of acrimony. On the other hand, if we are correct in arguing that even a friendly separation would be costly, then it surely follows that things could only be worse, if — in ways that are impossible to know in advance — the environment turned out to be hostile and acrimonious.

The basic framework for the analysis, outlined in Chapter 4, involves a two-step procedure. The first step is to analyze the shocks to the economy arising from Quebec separation; the second step is to assess the second-round, or longer-run, effects of these shocks. On this latter issue, we rely partly on the "vicious and virtuous circle" or "positive feedback" approach, as applied recently to studies of the U.S. manufacturing belt. The idea is that powerful forces draw people and capital to large economic centers and reinforce the initial advantages of those centers. If, however, there is a negative shock of sufficient magnitude and duration, these same forces can work in the opposite direction, leading to an unraveling process that reinforces the initial shock.

We then apply this analytical framework, in Chapter 5, in a brief history of the rise and relative economic decline of Montreal. This history emphasizes a contest between two sets of opposing forces: the natural continental forces drawing resources and population westward and southward versus the forces of positive feedback that favor established centers and the important role of the federal government in transferring resources and economic activity from west to east. We pay particular attention to the 1976–80 period, when, for the first time, Quebec separation became a significant threat. The experience of this period, we argue, has lessons for today.

Our treatment in Chapter 6 of the first-round, or shock, effects of Quebec separation focuses on vulnerable sectors or industries, the division of federal assets and debt, the implications for the Quebec budget and economy, and the likely reaction of the Quebec government to these shocks. We provide five-year estimates of the impact

of sovereignty on the Quebec budget and outline an austerity package that illustrates the scale of the fiscal reaction that might be necessary. The argument on second-round effects, in Chapter 7, turns mainly on a mutually reinforcing process of higher taxes and rising out-migration of capital and skilled people leading to further rounds of out-migration and further rounds of higher taxes or reduced public services. We argue that while unilingual francophones may well be unlikely to leave Quebec, many of the most highly skilled francophones have already been "internationalized" and are likely to be highly mobile.

Chapter 8 provides a discussion of offsetting factors that could work to the long-run economic benefit of a sovereign Quebec. These include arguments related to overlapping jurisdictions, policy coherence, and the capacity to control government spending and deficits. The final chapter presents conclusions.

Chapter 2

The Likelihood of Separation: Substance and Process

On matters of substance, we agree with Pierre Fortin and other francophone Quebecers that if separation is to be avoided, "the Rest of Canada" (ROC) will probably have to "swallow Meech", a process that could be rendered less painful by simultaneously reforming the Senate and satisfying the aspirations of aboriginal people.[1] Such a package, as Charles Taylor emphasizes, requires an acceptance by ROC of "deep diversity", acceptance that an unadulterated Charter-based vision of Canada is not the only possible model of the liberal society.[2] Yet it would seem that ROC is moving toward less, rather than more, tolerance in this area.[3] This problem of substance is compounded by the dangers of the process on which Canada has embarked. We comment now on two aspects of that process.

Quebec's Strategy

French Quebec, it is often said, is a cohesive and relatively homogeneous society. As such, it has a clear and cohesive strategy on the constitutional issue. As Fortin makes clear, the great majority of Quebec francophones who are not committed separatists are never-

1 See Pierre Fortin, "The Threat of Quebec Sovereignty: Meaning, Likelihood, and Economic Consequences" (Paper presented at the Conference, "The Economic Dimensions of Constitutional Change," sponsored by the John Deutsch Institute for the Study of Economic Policy, Kingston, Ont., June 4–6, 1991).

2 Charles Taylor, "Shared and Divergent Values," in R.L. Watts and D.M. Brown, eds., *Options for a New Canada* (Toronto: University of Toronto Press, 1991).

3 For a recent illustration of anti-Quebec attitudes, see David J. Bercuson and Barry Cooper, *Deconfederation: Canada without Quebec* (Toronto: Key Porter Books, 1991).

theless willing to use the threat of sovereignty as a club to obtain official recognition of Quebec as a "distinct society". If this threat is to be credible, people in both Quebec and ROC must believe that Quebec will, in fact, declare sovereignty if ROC keeps denying Quebec's distinctiveness. It follows that an essential component of the strategy is to convince people that sovereignty would not be bad for the Quebec economy.

Perhaps for this reason, few francophone economists or business leaders are willing to take issue with this optimistic view in public.[4] To do so would be to reduce the credibility of Quebec's threat and hence to reduce the chances that Quebec will obtain recognition as a distinct society. Consequently, while it is true that Quebec's economic leadership is well represented in the media and in constitutional commissions, it is also true that the messages received from francophone economists on the economic consequences of separation have been upbeat. Negative messages received from anglophones or from francophones who are known to be federalists are often dismissed as threats or as federalist propaganda.

The strategy, then, is to threaten sovereignty and to increase the credibility of that threat by painting rosy pictures of the economic consequences of Quebec separation. Let us suppose for a moment that the central contention of this study is correct — that the rosy pictures are false, and that separation would impose major economic costs. If this is true, then the Quebec strategy involves two great dangers from an economic point of view. The first is that Quebecers, convinced of the economic viability of sovereignty because they have heard only what they want to hear, will not be prepared to compromise. Clearly an unwillingness to compromise will reduce the chances that an agreement will be reached. It is in the nature of Quebec's strategy that voices of caution coming from, say, the francophone business community are likely to arrive relatively late in the proceedings. By then it may be too late to turn around public opinion.

4 We acknowledge that this is a double-edged argument. As we indicated in the preface, it is equally true that francophones may question the motives of anglophones who claim that separation would be damaging to the Quebec economy.

The second and related danger is that ROC will call Quebec's bluff, in which case Quebec will have to separate or lose face. ROC may well call Quebec's bluff; it is only human nature to respond negatively to threats. Furthermore, over the past couple of years, several factors, including both concrete developments and evolving perceptions, have combined to increase hostility toward Quebec. On the factual side, one can cite Quebec's language laws, its refusal to negotiate with the other provinces, the aggressive tone of the Allaire Report,[5] and the apparent lack of interest in the resolution of long-standing grievances in other regions of the country. At least as important are evolving perceptions in ROC, perceptions that are no less important for being (we believe) mainly incorrect. These include the perception that Quebecers see themselves as more distinct and hence "more equal" than other Canadians; the idea that Quebecers feel little or no sense of affection or attachment to Canada; and, perhaps most dangerous of all, the notion that the ROC economy would benefit — or at least not suffer — from Quebec separation.

If ROC does call Quebec's bluff and Quebec must either separate or back down, the chances of separation would rise substantially. Quebecers voted for Canada in 1980 and feel that they were then excluded from the repatriation of the Constitution in 1982. Quebec accepted a package (the Meech Lake Accord) containing its bare minimum demands in 1987, only to see it rejected three years later. Quebecers, we believe, may be willing to pay a high price to avoid what many would see as a third major humiliation in the space of a decade.

Bargaining Problems and the Ability to Commit

There is another reason for ROC to call Quebec's bluff, and this could turn out to be crucial. A major concern in ROC is that Quebec's current threat to declare sovereignty will not be its last. Even if the

5 Quebec Liberal Party, Constitutional Committee, *A Quebec Free to Choose* (Quebec, January 28, 1991), usually referred to as the "Allaire Report" after the Committee's Chairman, Jean Allaire.

current crisis is somehow resolved, what will happen if the Parti Québécois comes to power in some future election? Is it not likely that ROC will face a never-ending series of Quebec demands for ever-greater powers, with eventual separation all but inevitable? Even the more pro-Quebec citizens in ROC will balk at substantial concessions to Quebec if a major effect of these concessions is to make it easier for Quebec to separate a few years down the road.

There are at least two aspects to this problem. First, Canadians may be caught in a classic bargaining problem. Quebec will not make concessions to ROC for fear of being rejected once again. ROC will not make concessions to Quebec for fear that a future Quebec government will reject it a few years hence. Escape from such a deadlock would seem more likely if one of the parties were willing to move first in a cooperative way, but it is not clear who would move first and in what way.

The second aspect of the problem is that even if the two parties were willing to cooperate, it is not clear how, in a technical sense, Quebec could make a credible medium-term commitment to a new Constitution — say, for a period of 20 years. It may well be in the interests of Quebec to make such a commitment to Canada at some point in the negotiations — it could induce ROC to make substantial concessions to Quebec; and almost everyone seems to agree that Canadians do not want to go on talking about the Constitution *ad nauseam*. Yet how can the government or the people of Quebec make commitments that extend well beyond the mandate of the current government? We do not know the answer to this question.[6]

For these and other reasons, the likelihood of Quebec separation seems high enough to justify an analysis of its economic consequences.

6 Assuming that Quebec held a referendum asking the voters to endorse renewed federalism, one possibility might be to include a reference to a period of, say, 20 years in the referendum question. A second possibility might involve a Canada-Quebec agreement stating that, for a certain period of time, the federal government would disallow any provincial legislation calling for a referendum. It is not clear, however, whether either of these measures would be sufficient to prevent a future Parti Québécois government from acting on the sovereignty issue, especially if there were some contentious issue of the day that served to mobilize public support.

Chapter 3

Quebec Separation and the Degree of Acrimony

In studying the economic effects of Quebec separation, the question of acrimony is the most difficult and arguably the most important. For some, like historian Desmond Morton, it is axiomatic that the breakup of a country involves extreme acrimony: possibly a civil war, probably bloodshed, and certainly intense economic and human suffering. For others, like Jacques Parizeau, it is equally evident that separation would be peaceful because acrimony would hurt both parties and "the Rest of Canada" (ROC) would not wish to inflict damage on itself. So, depending on the degree of acrimony, the process of separation could involve anything from a nonevent to civil war. Although this observation gets us nowhere, it does not seem possible to proceed much further. In other words, we do not know how to bracket the upper and lower bounds of acrimony in a manner that is in any way scientific or objective.

For this reason, the core of the study is based on the assumption of a nonacrimonious breakup. Since the acrimony issue is so important, however, we briefly discuss a key determinant of the degree of acrimony, as well as three areas — territory, currency, and debt sharing — with the potential to generate great animosity. The reader can then adjust his or her assessment of the costs of separation depending on a personal assessment of the probable degree of acrimony.

Acrimony and Legitimacy

The perceived legitimacy of the process leading to Quebec separation would probably be an important determinant of the degree of

acrimony.[1] Consider, for example, two possible referendum outcomes that show the extremes of legitimacy, the first reflecting strong legitimacy and the second very little legitimacy:

> Are you in favor of Quebec separating from Canada and becoming an independent, sovereign state one year from today?
>
> Yes: 80% No: 20%

> In the context of a North American Free Trade Area, are you in favor of Quebec exercising complete sovereignty on its territory, effective one year from today?
>
> Yes: 51% No: 49%

Assuming the government of Quebec proceeded to declare sovereignty in either of these two cases, it is obvious that the potential for acrimony is much greater in the second case than in the first. Given a decisive answer to a clear question, ROC — as well as "No" voters within Quebec — may well accept the inevitable and act to minimize the costs of transition to Quebec sovereignty. In the second case, however, the question is so wishy-washy and the majority so slim that the result would lack legitimacy for many people. Under such conditions, one can imagine any number of ugly scenarios, including a refusal by the federal government to recognize Quebec's sovereignty and attempts by Quebec's nonfrancophone communities (including Aboriginal peoples) to partition the province.

Territory, Debt, and Currency

Whether because a Quebec referendum delivers a decisive answer to a tough question or for other reasons, we could end up with a

1 See José Woehrling, "Les aspects juridiques de la redéfinition du statut politique et constitutionnel du Québec," in Quebec, Commission on the Political and Constitutional Future of Quebec [Bélanger-Campeau Commission], *Éléments d'analyse institutionnelle, juridique et démolinguistique pertinents à la révision du statut constitutionnel du Québec* [Background papers], vol. 2 (Quebec, 1991), pp. 1–110.

relatively amicable separation. As the heat rises, however, each of the following areas has the potential for generating major problems.

Territory

In the event of separation, it is conceivable that both ROC and the Cree might lay claim to the territory of northern Quebec, including James Bay. A ROC claim could be based on the argument that this land was ceded to Quebec in 1912 on the implicit understanding that Quebec would remain in Canada. A Cree claim would likely be based on aboriginal possession, and there are signs that they would elect to stay with Canada if Quebec separated. They would undoubtedly receive strong support from aboriginal peoples across the continent, which would create a major political crisis, and it is not at all clear how the governments of Canada and Quebec would respond.

Among nonfrancophone Quebecers, there is some talk of an eleventh province and a corridor to Atlantic Canada. If a referendum result were decisive and separation proceeded relatively amicably, then it is difficult to imagine that anything of this nature could happen. Suppose, on the other hand, that Quebec were to make a unilateral declaration of independence (UDI) under conditions of debatable legitimacy and that Canada were to refuse to recognize this declaration. Several hundred thousand loyal Canadians in southwest Quebec would wish to continue to pay federal taxes and would, perhaps, request federal protection. The ultimate result seems impossible to predict.

Debt

If the parting were amicable, the parties would probably arrive at a relatively simple formula for sharing the debt quite quickly. Suppose, however, that the federal government were to refuse to recognize Quebec sovereignty, at least in the first instance. It then follows, as a matter of logic, that the federal government would: (a) refuse to negotiate with Quebec on the sharing of assets and debt; and (b)

continue to demand the payment of federal taxes by Quebec residents. It is impossible to predict the outcome of such a struggle for legitimacy and control between two opposing governments. Quebecers often say that the province's bargaining position would be enhanced by the fact that Quebec "would write the cheques," but this argument rests on the implicit assumption that the two parties have already accepted the principle of sovereignty. If such were not the case — and it seems unlikely that the federal government would accept the principle of Quebec sovereignty before resolving the debt question — the prior debate would involve cheques written by individual Quebec taxpayers or their employers to Ottawa.

Currency

Under almost any imaginable circumstances, it is probable that Quebec would continue to use the Canadian dollar in the immediate aftermath of separation. Moreover, ROC could not stop Quebec from doing this, except at major cost to itself and to Quebec. We would, however, add two caveats. First, if Ottawa chose to enter a high-stakes poker game, the Bank of Canada could issue instructions to the chartered banks that would make it very inconvenient for Quebec to conduct clearing operations. This could precipitate the launching of a Quebec currency. Second, the slightest rumour, at the height of a political crisis, that a new Quebec currency was being contemplated could result in a major flow of deposits from Quebec branches to Ontario branches of Canadian chartered banks — or, more probably, to New York. In response to a significant drop in the liabilities and liquidity of their Quebec-based operations, financially prudent chartered banks might well respond with a corresponding reduction in their assets — that is to say, a reduction in their loans to Quebec businesses and households. The resulting credit crunch could be substantial; conceivably, in an extreme case, it could be so large as to induce Quebec to issue its own currency. All of this, it should be noted, is extremely speculative, and the division of opinion among bankers and economists is unusually sharp.

Questions of territory, debt, and currency could well present major hurdles to a smooth and nonacrimonious transition. Nevertheless, for the remainder of this study, we shall assume that these problems will in fact be resolved in such a way as to permit a "friendly breakup" to occur.

Chapter 4

The Analytical Framework: Shocks and Propagation Mechanisms

As stated in Chapter 1, the core of our analysis follows a two-step procedure, beginning with the shocks, or first-round effects, of Quebec separation and then considering the second-round, or longer-run, effects. The first step is easier and more mechanical than the second. In analyzing the shock of separation, our procedure will be to assess the situation in a number of vulnerable areas and then to estimate the impact on the Quebec economy and Quebec government budget. While there is certainly room for debate on some of our assumptions, the basic approach to the subject should not be controversial.

The second step is both more difficult and more speculative, because there is no generally accepted method for analyzing the long-run effects of shocks in general or the shock of Quebec separation in particular. This statement remains true in spite of what seems to be the conventional approach to assessing the long-run economic effects of Quebec sovereignty, which draws a sharp distinction between transition costs and long-run effects. Transition costs may turn out to be large, but because they are *temporary*, they can be ignored when it comes to the long-run or *permanent* effects of Quebec sovereignty. This means that the list of factors influencing transition costs is entirely distinct from the list of factors determining long-run effects. The two sets of factors contain no overlap. For example, one approach to the long run is to compare Quebec with other countries. Since Quebec compares favorably with smaller European countries,

it is concluded that once the new country has absorbed the costs of transition, it is likely to be both viable and prosperous.[1]

While we certainly agree that Quebec fares well in comparison with other countries in terms of the skills of its people and the stage of its economic development, it is still possible that this conventional wisdom contains a fatal flaw. To put the point bluntly, the transition period could last forever, in the sense that the ultimate destination might itself depend on the nature of the transition. If this is the case, then there is no longer any clear distinction between short run and long run, since shocks or disturbances that we normally treat as short run turn out to have permanent effects. If this argument is correct, then we cannot look at, say, Austria today and Quebec today and conclude that a sovereign Quebec would be a prosperous place. We would have to compare contemporary Austria with a Quebec that could be seriously and perhaps permanently weakened by the process of transition to sovereignty.

As with all fundamental questions in economics, there is no simple or definitive answer on this issue. The subject lies at the core of the study of economic growth and development and the reasons for the rise and fall of nations, regions, and cities. It is also closely related to a growing modern literature that asks whether the effects of economic shocks are permanent or temporary. For example, the literature on "hysteresis", which developed in the aftermath of seemingly permanent increases in European unemployment, analyzes reasons why temporary shocks can have permanent effects on unemployment.[2] The related literature on "unit roots" considers and tests the possibility that temporary shocks result in permanent

1 Of course, this is not the only basis for the view that a sovereign Quebec would fare well economically. Two other arguments pointing in the same direction are discussed in Chapter 8.

2 See, for example, Olivier Blanchard and Lawrence Summers, "Hysteresis and the European Unemployment Problem," *NBER Macroeconomics Annual* 1 (1986): 15–78; and Pierre Fortin, "The Phillips Curve, Macroeconomic Policy, and the Welfare of Canadians," *Canadian Journal of Economics* 24 (forthcoming, 1991).

changes in real GDP.[3] The literature on "chaos" analyzes the possibility that very small differences in initial conditions can lead to extremely large differences in ultimate outcome.[4]

Notice that, in all of these examples, shocks that are small or temporary end up having effects that are large or permanent. It is also true that in all three cases there is intense debate and disagreement among economists today. How, then, if we do not know whether shocks to unemployment and production have permanent or temporary effects, can we possibly be sure that the shock associated with the breakup of a country — even a "friendly breakup" — will have only temporary effects on the economy?

Perhaps most directly relevant to the subject is the recent revival and extension of old ideas in the literature on economic development and economic geography. A particular example, which is explored further in Appendix B, is the work of Paul Krugman, who analyzes the role of "history" and "positive feedback" in regional economic development. Because of economies of large-scale production or for other reasons, a region or city that enjoys a relatively small initial advantage can find itself launched on a circular process that favors its continued growth. Once established as leading centers, major cities such as Montreal and New York benefit from powerful advantages or "agglomeration effects" that help them maintain their leading positions in the face of negative shocks. On the other hand, if there is a negative shock that is large and long lasting, then the same circular process that favored the buildup of a region or city could work in the opposite direction as the regional economy "unravels". Whether or not this happens depends on the size and duration of the shock and the nature of the positive feedback effects.

In the next chapter, we apply this positive feedback approach to a short history of the rise of the Montreal economy and its

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3 See, for example, Pierre Perron, "The Great Crash, the Oil Price Shock, and the Unit Root Hypothesis, *Econometrica* 57 (1989): 1361–1401.

4 See, for example, James Gleick, *Chaos: Making a New Science* (New York: Viking Press, 1987); and William J. Baumol and Jess Benhabib, "Chaos: Significance, Mechanism, and Economic Applications," *Journal of Economic Perspectives* 3 (Winter 1989): 77–105.

subsequent decline in relation to Toronto, with particular emphasis on the impact of the threat of separation during the 1976–80 period. This history serves to illustrate both the "up side" and the "down side" of our approach, and we also argue that it contains lessons for today.

Chapter 5

Montreal in Historical Perspective

The Rise of Montreal

Montreal had an important head start over Toronto from the fact that it was settled earlier. As a result, Montreal became the undisputed capital of what Donald Creighton called the commercial empire of the St. Lawrence. By the time of Confederation, however, and following the westward shift of population and agricultural production to Ontario, Montreal had lost a part of its pre-eminence to Toronto. While "positive feedback" effects certainly favored Montreal, the importance of these effects during this period was limited by the small scale of most manufacturing industries — that is, the relative unimportance of economies of large-scale production — as well as by the inability of the Montreal merchants to maintain their monopoly position as the sole handlers of the imports and exports of what they regarded as their Ontario hinterland.[1]

Nevertheless, to a major degree Montreal overcame the forces pulling people and capital westward, and it remained Canada's largest city, as well as its commercial and industrial capital, until well beyond the midpoint of the twentieth century. It was natural that Montreal should become Canada's leading industrial center following the industrial growth of the late nineteenth century, and it was Montreal, not Toronto, that became the terminus of the great east-west railway network of that period.

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1 For a more detailed discussion of some of these historical issues, see John McCallum, *Unequal Beginnings: Agriculture and Economic Developments in Quebec and Ontario until 1870* (Toronto: University of Toronto Press, 1980).

Over all of these years, federal government policies played an important role in reinforcing these positive feedback effects and helping to maintain the population and economic activity of eastern Canada.[2] And despite the Canada-U.S. Free Trade Agreement, federal policies continue to redirect income, spending, and employment in an easterly direction. Examples include equalization payments, regional development policies, and a generous unemployment insurance program. Although the financial and political capacity of the federal government to transfer resources eastward has probably diminished somewhat over the past decade, such transfers remain very large. For example, as will be seen later in this study, the net financial benefit to Quebec of the two most important of these federal programs — equalization payments and unemployment insurance — is on the order of $3 billion per year.

Montreal in Relative Decline

For at least three decades, however, the position of Montreal relative to Toronto has been in decline. In an interesting recent study of this trend, Mario Polèse begins by noting that the hierarchy of cities is usually very stable — for the positive feedback reasons discussed above — and that standard economic forces would not have predicted the observed decline in Montreal relative to Toronto. Rather, Polèse says, Montreal's gradual decline should be attributed to the rise of Quebec nationalism beginning with the "Quiet Revolution" in the 1960s. He argues that because of these developments, in combination with the importance of language in determining the costs of recruitment and communication, it was natural that business should gradually gravitate from Montreal to Toronto. As a result, Montreal had lost its comparative advantage as Canada's business headquarters on a predominantly English-speaking continent.[3]

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2 Notice, however, that the definition of "East" has changed over time, with Ontario considered "West" for much of the nineteenth century.

3 Mario Polèse, "La thèse du déclin économique de Montréal revue et corrigée," *Actualité Économique* 66 (June 1990): 133–146.

In another recent study, Pierre Fortin observes that, beginning around the mid-1960s, Quebec's employment performance declined relative to that of Ontario. Drawing in part on Polèse, he attributes much of this decline to the rise of Quebec nationalism, the Quiet Revolution, and the resulting departure of the anglophone business élite from Montreal.[4]

We certainly agree with the basic thrust of the Polèse-Fortin thesis — that, starting around the early 1960s, a gradual decline in the relative position of Montreal was probably an inevitable consequence of fundamental social change in Quebec. We do, however, raise two questions of timing. First, in terms of long-run trends, it is arguable that Montreal has been declining relative to Toronto for more than a century. This interpretation receives some support from Figure 1, which plots the ratio of Montreal's population to that of Toronto since 1871. The second question of timing concerns the threat of Quebec separation over the 1976–80 period. We shall present evidence suggesting that, starting around 1976, there was an abrupt and possibly permanent increase in Montreal's unemployment rate relative to that of Toronto. These questions of timing will lead us to qualify the Polèse-Fortin thesis in certain respects.

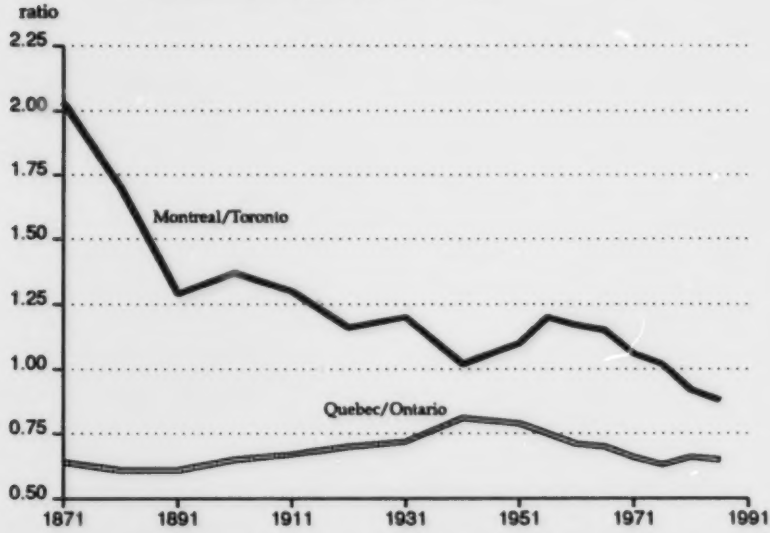
The Threat of Separation, 1976–80: Evidence of the Cost to Montreal

Figure 2 plots unemployment rates for Montreal and Toronto between 1966 and 1990 (plus the first six months of 1991), while Figure 3 does the same thing for Quebec-minus-Montreal and Ontario-minus-Toronto.[5] Figure 2 suggests a rather dramatic increase in the

4 Pierre Fortin, "La question de l'emploi au Québec: la photo et le film" in Quebec, Commission on the Political and Constitutional Future of Quebec [Bélanger-Campeau Commission], *Éléments d'analyse institutionnelle, juridique et démolinguistique pertinents à la révision du statut constitutionnel du Québec* [Background papers], vol. 2 (Quebec, 1991), pp. 167–242.

5 The "old" unemployment figures for 1966–75 are not directly comparable with the "new" figures for 1975–90. Our procedure was to use the one year for which we had both sets of figures (1975) to adjust the 1966–74 data by the amount of the difference between the "new" unemployment rate in 1975 and the "old" unemployment rate in 1975.

Figure 1: ***Population Ratios, Montreal/Toronto and Quebec/Ontario, 1871–1986***



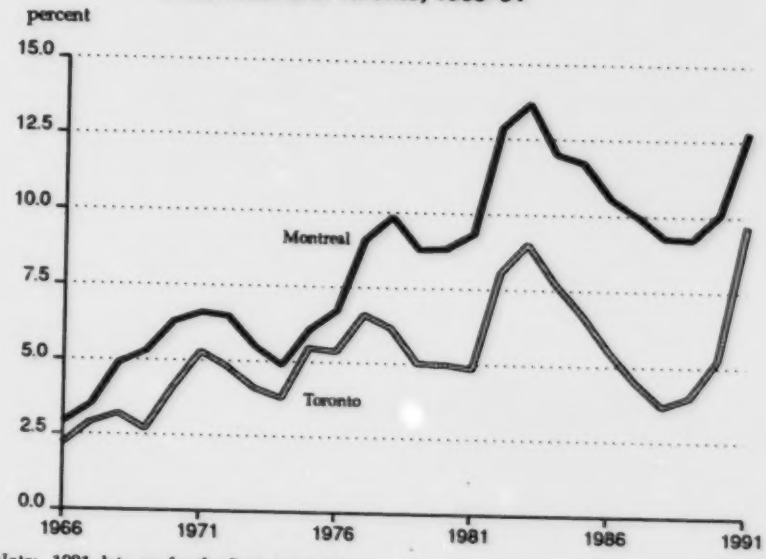
Note: Quebec/Ontario population ratio excludes the populations of Montreal and Toronto.

Source: Mario Polèse, "La thèse du déclin économique de Montréal, revue et corrigée," *Actualité Économique* 66 (June 1990), Figure 3; and Census of Canada.

Montreal-Toronto unemployment rate gap beginning around the end of 1976 and lasting at least until the end of 1990.[6] Figure 3 suggests, however, a relatively stable gap between provincial unemployment rates if one excludes the two major cities. These visual impressions are confirmed by the numbers. The Montreal-Toronto unemployment gap jumped from a 1966–75 average of 1½ percentage points to an average of nearly 5 percentage points between 1981

6 The figures show that there was a substantial narrowing of the gaps in the first six months of 1991. At the time of writing, it is much too early to know whether this involves the beginning of a long run structural change or just a transitory matter involving the timing of the recession. One possible explanation is that Ontario has been harder hit by the recession because of the greater concentration of interest-sensitive, durable goods industries in that province. Also, some commentators argue that the Ontario economy has been adversely affected by some of the policies of that province's government.

Figure 2: ***Unemployment Rates in Montreal and Toronto, 1966–91***



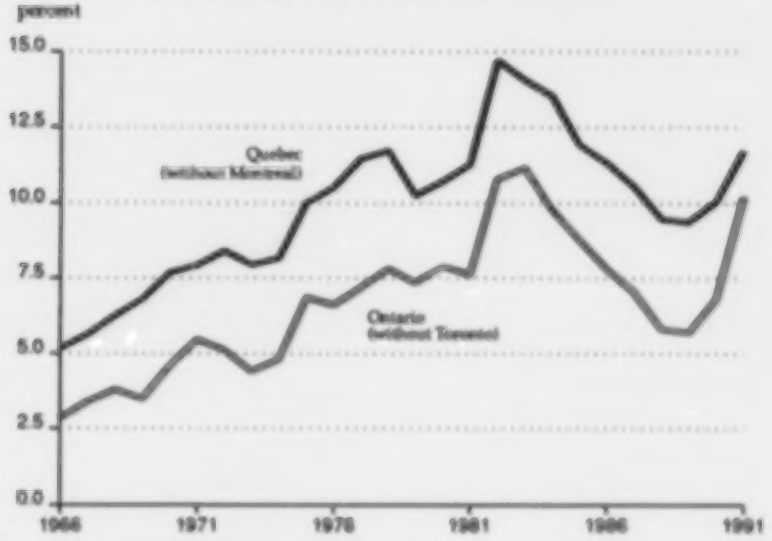
Note: 1991 data are for the first six months.

Source: Statistics Canada, *The Labour Force*, Cat. no. 71-001, various issues.

and 1990. On the other hand, the Quebec-Ontario gap — excluding the two major cities — has remained quite stable at 3–4 percentage points since 1970.

Now, this picture is certainly consistent with the view that the threat of separation, beginning with the election of the Parti Québécois in 1976 and continuing until after the 1980 referendum, imposed a heavy burden on the Montreal economy. It is consistent with a story based on the out-migration of people, companies, and jobs, accompanied by a failure to create enough alternative jobs to employ those who remained. Moreover, the situation would have been even worse had there not been a large and unsustainable surge of public-sector expenditure during this period. Such an increase in government expenditures would certainly not be repeatable under conditions of Quebec separation in the 1990s.

Figure 3: ***Unemployment Rates in Quebec (without Montreal) and Ontario (without Toronto), 1966–91***



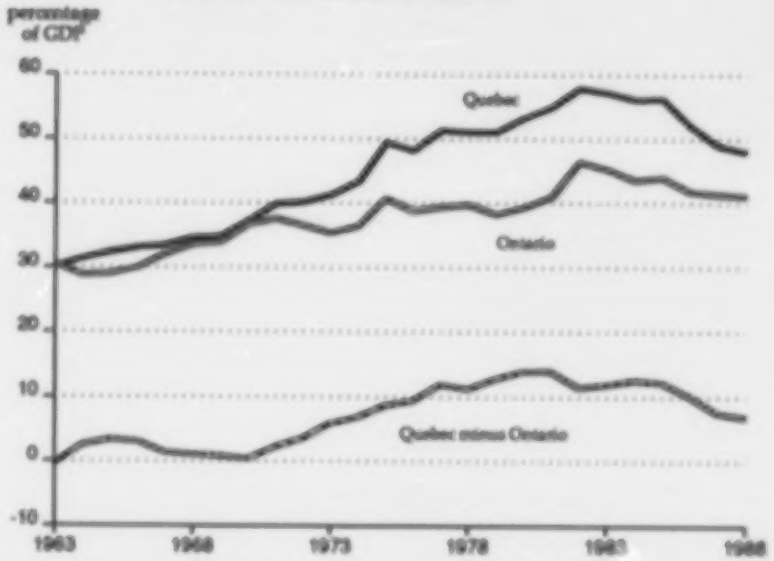
Note: 1991 data are for the first six months.

Source: Statistics Canada, *The Labour Force*, Cat. no. 71-001, various issues.

Figure 4 backs up this last point with a plot of total public-sector spending relative to GDP in Quebec and Ontario. We adopt the broadest possible definition of government spending: current expenditure (including transfer payments) by all levels of government as well as investment by governments and government-owned enterprises. Public-sector spending in Quebec rose to well over half of GDP over the decade beginning in 1977, compared with about two-fifths of GDP in Ontario. While a part of this increase represented productive investment in James Bay and other projects, at least three-quarters of it was due to very substantial increases in current expenditure by both levels of government — accompanied by large increases in government deficits.[7] In the absence of this major

7 Quebec's government budgetary deficit averaged 1.3 percent and 1.6 percent of GDP in 1970–74 and 1986–90, respectively. In the intervening years, the deficits...

Figure 4: ***Total Public-Sector Expenditure in Quebec and Ontario, 1963–83***



Source: Statistics Canada, *Provincial Economic Accounts*, Cat. no. 13-213, various issues; and idem, *Private and Public Investment in Canada*, Cat. no. 61-205.

boost to the economy, there would have been a larger increase in the Quebec-Ontario unemployment rate gap during the 1976–80 period.

The Threat of Separation, 1976–80: Interpreting the Evidence

We agree with Fortin and Polèse that significant shifts in relative population and employment rates of Montreal and Toronto began in the 1960s (or earlier). Despite uncertainty regarding the timing of the

Note 7 - cont'd.

were substantially higher, averaging 2.8 percent of GDP in 1975–83 and peaking at 4.7 percent of GDP in 1980. See Quebec, *Budget*, 1991–92, Table 1, Appendix B, pp. 16–17.

long-run trends, we also agree that gradual shifts of this nature were probably an inevitable consequence of fundamental social change in Quebec. On the other hand, our analysis indicates that the abrupt upward shift in Montreal's relative unemployment rate began with the shift from the gradualist approach of the Quebec Liberal Party to the real threat of Quebec separation dating from the election of the Parti Québécois (PQ) in 1976. Moreover, at least as measured by unemployment rates, the fallout from this shock appears to have been permanent or at least very durable.[8]

This contrast between Liberal-style gradualism and PQ-style abruptness will be a recurring theme in this study. For example, in the discussion of areas that would be vulnerable under Quebec separation, we mention the dairy industry and clothing and textiles. Now, it is true that the clothing and textile industries have been in gradual decline for many years, and it is also true that the quota system in the dairy industry is likely to come under increasing pressure in future. However, it is one thing if these industries decline gradually over a period of decades, and it is quite another matter if an abrupt shock causes sudden reductions in employment in several vulnerable industries all at once. A modern economy is usually able to digest gradual change without major dislocation. Yet, abrupt and concentrated shocks are much less digestible and, as suggested by the experience of 1976–80, can result in prolonged and protracted periods of high unemployment. The same point can be made in terms of our positive feedback model: the danger that negative shocks will trigger an "unraveling" process is much greater when the shocks are large, abrupt, and all at once.

In terms of the future, we are aware of the argument that since many anglophone businesses and households have already left Quebec, there are a lot less to leave as of 1991. While there is clearly some truth in this argument, the extent of the reduction in the number of

8 To be more precise, we argue that much of the semi-permanent increase in unemployment can be explained by the threat of separation in combination with the limited mobility of labor. Low labor mobility can itself be explained by a combination of linguistic considerations and the availability of relatively generous unemployment insurance and social assistance.

these businesses and households should not be exaggerated. It is quite possible that actual separation would induce a higher fraction of departures applied to a moderately lower base. In any event, it will be seen from the analysis of the next two chapters that the reaction of anglophones is only one element — and by no means the most important — in the overall picture.

In conclusion, we believe that at least a good chunk of the large and possibly permanent jump in the Montreal-Toronto unemployment gap can be attributed to the dislocations caused by the threat of Quebec separation. While the Montreal economy absorbed the gradual social change of the Quiet Revolution without great pain, it seems that the much more abrupt political shocks of 1976–80 exacted a heavy toll in terms of unemployment. Moreover, the shock coming from a future Quebec separation could not be softened by a repetition of the surge in government spending that occurred during this earlier period. Federal government financing would no longer be available and, as we shall see in the next chapter, the government of a sovereign Quebec would have little choice but to carry out substantial spending cuts. Finally, if there were a further ratcheting up of the unemployment rate as a result of Quebec separation in the 1990s, it is clear that the burden of such a development would fall primarily on the least privileged and least mobile members of Quebec society.[9]

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9 Quebec-Ontario comparisons calculated by Fortin ("La question de l'emploi au Québec") illustrate this point well. In 1980, which was a good year, the mean duration of unemployment in Quebec was 22.3 weeks (compared with 13.5 weeks in Ontario), and 27.8 percent of the unemployed had been unemployed for six months or more (13.6 percent in Ontario). Jobs were scarce in Quebec, with 4.3 percent of the population holding part-time jobs when they would have preferred full-time jobs (2.1 percent in Ontario). The unemployment rate was 13.1 percent for people with less than nine years of schooling (5.9 percent in Ontario) compared with 4.6 percent for those holding university degrees (2.6 percent in Ontario).

Chapter 6

A Friendly Breakup: *First-Round Effects*

We define a friendly or nonacrimonious breakup as a business-like breakup in which "the Rest of Canada" (ROC) acts according to its national interest but without malice. In reality, any such agreement would be extremely complex, but as an indication of the possible flavor of a friendly settlement, we present an example of a seven-point plan in the box on the opposite page. This example suggests that the negotiations would be very difficult and that we are erring on the side of optimism — some would say wild optimism — in assuming that such an agreement could be reached. The details of the assumptions made in the box will be discussed at the appropriate point as the analysis proceeds.

We begin with a discussion of 12 specific industries or areas that are likely to be particularly vulnerable in the event of Quebec separation. Developments in these areas will have important direct effects on the economic well-being of Quebecers, as well as indirect effects operating through effects on the budget position of the new Quebec government.

We then devote the rest of this chapter to an analysis of the impact of separation on the Quebec government budget. The first step is to estimate the impact of Quebec separation on the budget, comparing the results with a base case that assumes continued federalism. The initial calculations are based on the assumption of no reaction by the Quebec government. This assumption is obviously wrong, and the last step is to consider possible reactions by the government of a sovereign Quebec in the light of the budgetary situation that it would face.

Terms of a Friendly Canada-Quebec Breakup

1. Canada recognizes Quebec as a sovereign nation.

2. To promote a smooth transition and ensure legal continuity, all legislation will remain intact unless changed explicitly. Canada agrees to cooperate with Quebec in ensuring a prompt and orderly transfer of the spending and taxing functions of government. Both parties agree to maintain the economic union and erect no customs posts or other barriers to the movement of people, goods, services, or capital. If requested, Canada will assist in negotiations with aboriginal peoples, while agreeing from the outset that the territory of Quebec is nonnegotiable.

3. Canada will support Quebec's efforts to become a party to the Canada-U.S. Free Trade Agreement and other international agreements at the earliest possible date.

4. At a future date, the two parties may enter into negotiations on a formal economic union. In the meantime, Canada agrees to periodic consultations with Quebec in such areas as defense policy and monetary policy. In a manner to be determined, the two parties will conduct a joint policy on tariffs and quotas.

5. Canada agrees to provide technical assistance if Quebec wishes to use the Canadian dollar.

6. Quebec agrees to assume a share of federal government gross liabilities equal to Quebec's share of Canada's GDP (23.4 percent). Quebec will also receive 23.4 percent of total federal investment income (excluding income received from the Bank of Canada), pending a series of studies on asset valuation and distribution. The mechanics of transferring the debt will be worked out in the near future.

7. The rights and privileges of nonfrancophones in Quebec and of francophones in Canada will remain unchanged.

Vulnerable Areas

Twelve vulnerable areas are identified in Table 1. Since we are focusing on an amicable separation, we exclude from consideration such disaster scenarios as the exclusion of Quebec from the Canada-

Table 1: ***Twelve Vulnerable Areas in the Event of Quebec Separation***
(in order of discussion in the text)

1.	Dairy industry
2.	Head offices
3.	Clothing and textiles
4.	Hull and surrounding area, and displaced federal civil servants
5.	Engineering industry
6.	Aluminium and other resource-based industries
7.	"Quebec Inc." policies
8.	Automobile industry
9.	Defense-related industries (aerospace, etc.)
10.	Out-migration
11.	Industrial relocation
12.	Construction industry and other indirect effects

U.S. Free Trade Agreement (FTA) or the loss of James Bay. In considering each of the 12 items on the list, it is important to think in terms of the difference between what would happen under Quebec separation and what would happen anyway. It will be seen that, in many cases, separation would not change long-run underlying trends, but it would convert gradual trends into more abrupt events. However, as we argued in the previous chapter, such shifts from the gradual to the abrupt are not unimportant, especially if all of the shocks are operating in the same direction and at the same time.

The first and perhaps most vulnerable case is Quebec's *dairy industry*, which currently has about 14,000 producers and accounts for more than a third of the province's farm cash receipts. Production and imports of dairy products in Canada are limited by legislation, with the result that domestic prices are much higher than world prices. Quebec producers account for a disproportionately large share of the industry, holding 48 percent of all Canadian quotas for the production of industrial milk and selling about a third of their output in other provinces. Assuming that ROC would not wish to pay large subsidies to the dairy farmers of an independent Quebec, it is likely that ROC producers would take over Quebec's "excess" quotas and that the Quebec industry would lose about a third of its

market. Alternatively, Quebec's dairy products might be sold to ROC at U.S. prices, in which case the loss of revenue to the industry would be on the order of $150–250 million per year.[1]

The *head office* functions of Montreal-based Canadian companies — such as Air Canada, Canadian National, Via Rail, Canadian Pacific, and Bell Canada — would be put at risk by Quebec separation. In some cases, all head office functions could be transferred, while in others, these functions might be split between Quebec and ROC. While many head offices have already left Montreal, an abrupt departure of substantial sections of those that remain would nevertheless constitute a major shock.

Canada's *clothing and textile industries* are highly protected by tariffs and quotas, and they are concentrated in Quebec. ROC could make itself substantially better off by reducing or eliminating protection in these areas and either subsidizing or compensating its own firms and workers. In return for agreeing to all the points described in the box, ROC might be able to get Quebec to agree to a substantial reduction in external tariffs and/or quotas on clothing and textiles.[2] Although Quebec's clothing industry has been declining gradually for years, it continues to employ some 50,000 people, with well over half of total shipments destined to ROC.[3]

Another vulnerable area concerns the 54,000 nondefense federal government employees who currently work in Quebec, and especially the 18,000 federal employees located in *Hull and its surrounding area*. The economy of this region is highly dependent on

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1 See W.H. Furtan and R.S. Gray, "Agriculture in an Independent Quebec," in Gordon Ritchie et al., *Broken Links: Trade Relations after a Quebec Secession*, The Canada Round 4 (Toronto: C.D. Howe Institute, 1991).

2 Since we are assuming the absence of customs barriers between Quebec and ROC — that is, that a customs union would be maintained — it follows that commercial policy would have to be jointly determined.

3 See Pierre-Paul Proulx and Guilain Cauchy, "Un examen des échanges commerciaux du Québec avec les autres provinces canadiennes, les États-Unis, et le reste du monde," in Quebec, Commission on the Political and constitutional Future of Quebec [Bélanger-Campeau Commission], *Éléments d'analyse institutionnelle, juridique et démolinguistique pertinents à la révision du statut constitutionnel du Québec* [Background papers], vol. 2 (Quebec, 1991), pp. 55–166.

stable federal government employment and spending. Some analysts might assume that many or most of the federal civil servants currently living or working in Hull would continue to work for the federal government. For financial reasons, however, ROC would have to undertake a substantial downsizing of the federal bureaucracy, and it is not even self-evident that Ottawa would remain the capital. Even in the most favorable case, Quebec would probably face a substantial loss of tax base: unless ROC were willing to see a substantial fraction of its public service pay income tax to a foreign country, it would have to impose a residency requirement on the federal bureaucracy.[4]

In a number of areas, the impact of separation would depend mainly on actions taken by the United States, which is likely to drive a hard bargain on Quebec's admission into the FTA.[5] We assume that Quebec would be admitted to the Agreement, but it would also seem reasonable to assume that Quebec would be in a very weak bargaining position *vis-à-vis* the United States.[6] Moreover, Quebec's position under the FTA would be influenced by its new status as a sovereign nation even if all other aspects of the Agreement remained unchanged. As Tom Courchene argues, the rules in a number of areas are tougher for sovereign countries than for provinces.

Industries or policies that could be influenced by a tough U.S. negotiating stance include procurement policies by Hydro-Québec that favor Quebec's *engineering industry*, large subsidies on the cost of hydro to the *aluminum industry* and other resource-based indus-

4 As an alternative to a residency requirement, Quebec might agree that ROC employees living in Quebec would pay income tax to ROC, with obvious negative implications for Quebec's tax base. While this agreement could be reciprocal, there are not many Quebec civil servants currently living in Ontario.

5 See, for example, Thomas J. Courchene, *In Praise of Renewed Federalism*, The Canada Round 2 (Toronto: C.D. Howe Institute, 1991); and Gordon Ritchie, "Putting Humpty Dumpty Together Again: Free Trade, the Breakup Scenario," in Ritchie et al., *Broken Links*.

6 It does not seem plausible that Quebec's bargaining power would increase significantly as a result of hydro power. Quebec's need for revenue from this source would increase as a result of sovereignty, and the United States is the only possible buyer.

tries, and some of the so-called *Quebec Inc.* policies — for example, those that seem to make it difficult for U.S. firms to acquire Quebec-based firms. Again, of course, one has to consider these effects against what is likely to happen anyway. For example, power subsidies to heavy industry may come under increasing opposition from the United States, whether or not Quebec remains in Canada. Moreover, at least in a long-run perspective, one can argue that such subsidies are bad for Quebec in any case. Our point, however, is that the act of separation will open up the FTA, thereby increasing the bargaining power of the United States and the likelihood of a series of abrupt negative shocks in a number of different areas all at the same time.

In the case of the *automobile industry*, Gordon Ritchie argues that, in the event of breakup, "the United States would seize the opportunity to terminate the auto pact and to set very stringent terms for any renegotiation."[7] Although Ontario would have more to fear from such a development than Quebec, the highly subsidized Hyundai plant in Bromont would thereby be placed in some jeopardy, as would the General Motors plant in Ste-Thérèse in the longer run.

The outcome for *defense-related industries* — aerospace, shipbuilding, and other suppliers to the military — is even more difficult to predict, since it would depend on both Canada-Quebec defense arrangements and the renegotiation of defense-sharing arrangements with the United States. At a minimum, however, it seems unlikely that Quebec-based suppliers to the Canadian Armed Forces could expect to maintain the status quo if, as the report of the Secretariat of the Bélanger-Campeau Commission assumes,[8] defense

7 Ritchie, "Putting Humpty Dumpty Together Again."

8 Secrétariat de la Commission sur l'avenir politique et constitutionnel du Québec," Analyse pro forma des finances publiques dans l'hypothèse de la souveraineté du Québec," in Bélanger-Campeau Commission, *Éléments d'analyse économique pertinents à la révision du statut politique et constitutionnel du Québec* [Background papers], vol. 1 (Quebec, 1991), pp. 393–511. It should be noted that this work was never endorsed officially by the Commission itself.

expenditures by an independent Quebec were only 14.5 percent of the Canadian total.

Undoubtedly, there would be substantial *out-migration* in the event of separation.[9] Exactly how much is open to question and would presumably depend in part on the nature of the separation and the guarantees offered to Quebec's nonfrancophone population. Recent opinion polls have indicated that as many as a half of Quebec anglophones would leave, but such information is not necessarily reliable. For purposes of the budget exercise carried out later in this chapter, we assume a much more modest rate of out-migration. Specifically, in the event of separation, we assume the rate of out-migration of nonfrancophones would be twice the rate that was observed over the 1976–81 period. In the absence of separation, we assume the same rate of out-migration as for the 1981–86 period. If we further assume that there is no effect on the migration patterns of francophones, then net out-migration in the event of separation would amount to 3.6 percent of Quebec's population — as compared with 0.9 percent in the absence of separation.[10]

With regard to *industrial relocation*, Quebec separation would certainly increase the degree of uncertainty about the security of future access by Quebec firms to foreign markets. This would obviously be so in the case of trade relations with ROC, since at present there is no uncertainty at all on this issue. As a result, Quebec firms might wish to hedge their bets or take out an insurance policy by locating a part of their production in ROC and/or the United States. There would be a further incentive to act in this way to the extent that the breakup was acrimonious and Canadians felt antagonism

9 Some overlap would occur between out-migration and some of the other "vulnerable areas" listed in Table 1, notably in the exodus of head offices. Hence, one cannot simply "add up" the job losses associated with each of the 12 categories.

10 All of the data used in these calculations are from Marc Termote, "L'évolution démolinguistique du Québec et du Canada," in Bélanger-Campeau Commission, *Éléments d'analyse institutionnel*, pp. 239–329. These assumptions imply that, in the event of separation, we would observe net out-migration rates of 28.8 percent and 9.2 percent for anglophones and allophones, respectively, and that this out-migration will have been accomplished by the end of the third year of Quebec independence.

toward products bearing "Made in Quebec" labels. To some extent, this effect could be symmetrical, with ROC firms tempted to locate part of their production in Quebec. However, since ROC is three times the size of Quebec, the net effect on investment in Quebec is likely to be negative — but of uncertain size.

We arrive, finally, at the twelfth item on our list: *the construction industry and other indirect effects*. Particularly in the Montreal area, it is clear that the departure of large numbers of people and head offices and other businesses would result in a substantial excess supply of office space and residential housing. While those remaining might well benefit from lower prices and rents, there would be a strong negative effect on the construction industry, as well as on suppliers and service industries in the Montreal area. More generally, both consumer and investment spending are likely to be weak, not only because of the direct shocks just described, but also because a high degree of uncertainty regarding future job security and economic growth is likely to induce cautious behavior on the part of both households and firms.

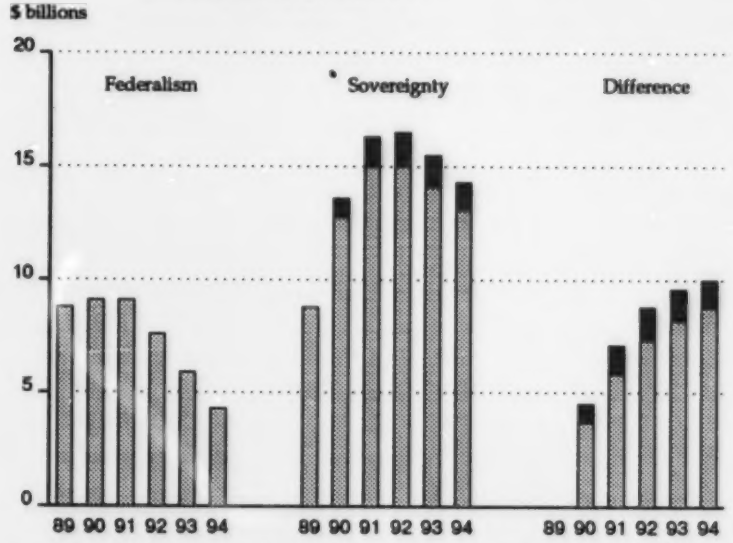
The Effect of Separation on Quebec's Budget

We now develop estimates of Quebec deficits and debt under sovereignty, comparing these with the corresponding deficits and debt under federalism. The deficit under the federalist base case must include both the deficit of the Quebec government and Quebec's share of the federal deficit. As discussed further below, we assume that Quebec's share of the federal debt under sovereignty would be equal to its share of Canada's GDP — that is, 23.4 percent. Given that assumption, we also attribute 23.4 percent of the burden of federal deficits to Quebec under the federalist scenario.[11]

Estimates of the federal deficit out to fiscal year 1994/95 are taken from the federal budget of February 1991, and it is assumed

11 By definition, the deficit is equal to the change in the debt. Therefore, it is logical to assign to Quebec the same proportion of the deficit that we assign for the debt.

Figure 5: *Consolidated (Federal plus Provincial) Quebec Deficit, 1989–94*



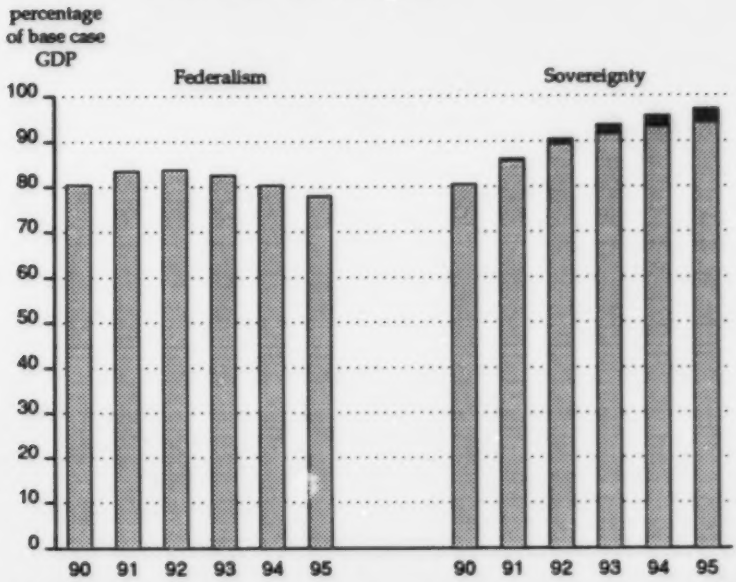
Note: Solid black segments of bars under "sovereignty" and "difference" represent the amounts subtracted under the optimistic scenario.

Source: Calculations presented in Table A-2 in Appendix A.

that the Quebec provincial deficit remains constant at $2 billion in every year. Given these assumptions, the evolution of Quebec's consolidated deficit and debt under federalism is shown in Figures 5 and 6. (The sovereignty cases can be ignored for the moment.) It can be seen that the consolidated deficit comes down markedly from $9.1 billion in fiscal year 1991/92 to only $4.3 billion in 1994/95. Since we are assuming that the provincial deficit is constant at $2 billion, all of this reduction is attributable to the planned reductions in the federal deficit. The consolidated debt is plotted as a percent of GDP,[12]

12 As described in detail in Appendix A, consolidated debt for 1990/91 is defined as Quebec's share of beginning-of-year federal net debt (23.4 percent of $358 billion, or $87.0 billion) plus provincial debt of $44 billion. Thereafter, provincial debt accumulates at a rate of $2 billion per year, while the portion of the federal debt that is attributable to Quebec accumulates by the amount of Quebec's share of the current year's deficit.

Figure 6: ***Consolidated (Federal plus Provincial) Quebec Net Debt, 1990–95***



Note: Solid black segments of bars under "sovereignty" represent the amounts subtracted under the optimistic scenario.

Source: Calculations presented in Table A-2 in Appendix A.

and it can be seen that the debt peaks at 83.8 percent of GDP at the beginning of 1992/93 and then declines to reach 78.0 percent of GDP at the beginning of 1995/96.

The federal deficit projections imply considerable restraint in federal program spending beginning in fiscal year 1992/93, as well as significant revenue increases and a pronounced downward trend in interest rates. Measured relative to GDP, program spending falls from 16.5 percent in 1991/92 to 14.9 percent in 1994/95, while budgetary revenues rise from 18.3 percent to 18.9 percent over the same period. In the present context, these points are important because they mean that any austerity package introduced by a newly independent Quebec would have to be superimposed on a base case

Table 2: ***Quebec's Budget Deficit under Federalism and Sovereignty***
(billions of dollars)

	Our Estimate of Quebec's Deficit	
	Under Federalism	**Under Sovereignty**
1. "Federal" operating balance	+1.4	-0.2
2. "Federal" net interest payments	-4.6	-4.6
3. "Provincial" deficit	-2.0	-2.0
4. Higher unemployment	–	-1.2
5. Out-migration	–	-0.4
6. Bank of Canada	–	-0.6
7. Interest premium	–	-0.7
8. Total deficit	-5.1	-13.7

	A Breakdown of Why the Deficit Would Be Higher under Sovereignty
Equalization payments (net effect)	-1.9
Unemployment insurance (net effect)	-1.8
Lower defense spending	+1.0
Other factors affecting the operating balance	+0.3
Dislocation effects (items 4 to 7 above)	-2.9
Total	-8.6

Note: Figures are for the base fiscal year 1990/91.

Sources: Canada, Budget, February 1991, Table 4; Quebec, Secrétariat de la Commission sur l'avenir politique et constitutionnel du Québec, "Analyse pro forma des finances publiques dans l'hypothèse de la souveraineté du Québec," in Bélanger-Campeau Commission, *Éléments d'analyse économique pertinents à la révision du statut politique et constitutionnel du Québec* [Background papers], vol. 1 (Quebec, 1991), Tables 13, 19, 24, 27; and authors' estimates (see text and Appendix A).

that already contains a substantial degree of restraint in the federal component of spending.

The next and major step is to introduce our assumptions regarding the budgetary impact of Quebec separation. The details of this exercise are reported in Appendix A. As does the Bélanger-Campeau Secretariat, we conduct our analysis as if 1990/91 is Year 1 for a sovereign Quebec; Table 2 reports our results for that year. The first column of the table reports Quebec's consolidated deficit under

federalism. Each of the two "federal" numbers is 23.4 percent of the corresponding figure taken from the 1991 federal budget, and the total deficit, as we saw earlier, is $9.1 billion. On the other hand, the estimated total deficit of a sovereign Quebec is $13.7 billion, and it can be seen from the table that several different factors contribute to this difference of close to $5 billion. These factors will now be considered in turn.

Operating Balance

The operating balance is defined as the difference between revenues (excluding investment income) and program spending. Both income from property and debt charges are excluded, since they will be considered jointly when we consider the division of federal debt and assets. It can be seen from Table 2 that Quebec's share of the federal operating balance under federalism is +$1.4 billion. On the other hand, we accept the Bélanger-Campeau Secretariat's estimate that a sovereign Quebec would incur an operating balance of –$0.2 billion on the "federal" component of its operations, implying a loss of $1.6 billion relative to the federalist case.[13]

The interpretation of this loss is as follows. Bélanger-Campeau estimates that in order to continue the same services to Quebecers that Ottawa now provides, Quebec's program spending would have to rise by $17.9 billion. Quebec would recuperate $17.7 billion in revenues formerly paid to Ottawa — after subtracting federal transfers that would be lost. We do not try to second-guess the work of the Bélanger-Campeau Commission in this area. We simply accept its figures of $17.9 billion and $17.7 billion.[14] The implication is that

13 Bélanger-Campeau Secrétariat, "Analyse pro forma," Table 27.

14 The $17.9 billion spending figure is taken from the Bélanger-Campeau Secretariat's middle scenario (Ibid., Table 26), which assumes a government spending reduction of $261 million resulting from a rationalization of certain federal and provincial operations. While some may argue that the scope for rationalization is much greater than this, it should also be noted that Bélanger-Campeau makes no allowance either for the setup costs associated with the assumption of all federal functions by Quebec or for the possibility that, in some areas, it would be more costly to spread the fixed costs of administration over a population of 7 million instead of 25 million.

a sovereign Quebec would have an operating balance of –$0.2 billion on the "federal" component of its operations, or a loss of $1.6 billion relative to the federalist base case.

While many offsetting items enter into this figure of $1.6 billion, one possible breakdown incorporating three of the largest items is shown at the bottom of Table 2. Quebec would face large net losses on equalization payments ($1.9 billion) and unemployment insurance ($1.0 billion). Taken by themselves, losses on these two items exceed the total loss of $1.6 billion. However, there would also be savings in some areas, notably on defense expenditures ($1.0 billion). These three items together give an additional net cost of $1.9 billion, implying that the net effect of all other items combined is a net saving of $0.3 billion.[15]

Division of Federal Debt and Assets

Here, we make two key assumptions. First, as already noted, we assume that Quebec's share of the gross federal debt would be equal to its share of GDP — that is, 23.4 percent. This figure is lower than its population share (25.4 percent) and slightly higher than its share of federal tax revenues (22.8 percent). Assuming an unchanged interest rate for the moment, this implies that Quebec's share of federal debt charges would be the same under sovereignty as under federalism.

The question of the valuation and sharing of federal assets is horrendously complicated. To avoid these complications, and also because our main purpose is to estimate the impact on the Quebec budget, we focus on Quebec's share of the *income* from federal assets

15 The figures are derived as follows:

Equalization: 23.4 percent of total federal government expenditures on equalization payments minus Quebec receipts;

Unemployment insurance (UI): Premiums paid by Quebecers minus UI payments to Quebecers;

Defense: 23.4 percent of Canadian expenditures on defense minus the Bélanger-Campeau Secretariat's estimate of what a sovereign Quebec would spend.

— a known dollar figure — rather than on its share of the assets themselves. However one might choose to value assets and whatever might be the physical and financial assets that Quebec ultimately acquires, we assume that Quebec's income from these assets is equal to 23.4 percent of the total.

In brief, we assume that a sovereign Quebec would pay 23.4 percent of federal debt charges and that it would receive 23.4 percent of federal interest income. Since we also attribute 23.4 percent of these items to Quebec under the federalist scenario, it follows that "federal" net interest payments are the same under both federalism and sovereignty. As shown in Table 2, net interest payments amount to $8.6 billion under both regimes. A friendly breakup could involve the immediate adoption of a rule such as this, pending future adjustments that would follow years of detailed studies on asset valuation and distribution.[16]

Higher Unemployment

Everyone agrees that there would be some dislocation resulting from Quebec separation. The question is how much and for how long. Based on our survey of the 12 vulnerable areas and our discussion of Montreal's experience over the 1976–80 period, as well as more general considerations relating to the impact of a major increase in the uncertainty facing consumers and investors, it seems to us that such dislocation is likely to be substantial and protracted. On the other hand, it is certainly possible that others will have a different opinion, and we have not been able to carry out industry-level studies.

In view of this uncertainty, we make an assumption that we regard as plausible, but we also present a sensitivity analysis that clearly indicates the implications of alternative assumptions. We

16 For readers accustomed to using the Bélanger-Campeau proposal as a reference point, Appendix A provides a reconciliation between it and our assumptions, as well as a brief discussion of competing rationales on the sharing of pension liabilities and the division and valuation of assets.

assume that the dislocations associated with separation would cause the unemployment rate to rise by a maximum of 2 percentage points in Years 2 and 3 — relative to the federalist base case — and then subsequently decline. As an alternative, we assume that the maximum increase in the unemployment rate would be only 1 percentage point instead of 2. Indeed, the results are presented in such a way that the reader who wishes to assume that unemployment would not be affected at all is able to read off the implications of that assumption. It is possible that detailed sectoral studies currently being conducted by other analysts will provide us with better information on this subject, but even with such studies, the degree of uncertainty on this issue would still be extremely large. According to assumptions that are explained in Appendix A, higher unemployment would add $1.2 billion to the deficit in Year 1 (see Table 2).

Out-Migration

As already stated above, we assume that, by the third year of independence, additional out-migration due to separation would amount to 2.7 percent of the Quebec population. At least in the short run, out-migration would reduce the tax base by more than it would reduce government expenditure on public services. This is partly because there are fixed costs associated with the delivery of public services, partly because the out-migration would involve both households and companies, and partly because the more mobile members of each of Quebec's linguistic communities generally have higher incomes than the average member of that community.[17]

The Bank of Canada

Contrary to Bélanger-Campeau, we assume that Quebec's share of the debt would be calculated without reference to the Bank of

17 That is to say, more mobile anglophones tend to have higher incomes than less mobile anglophones; the same point holds among francophones and allophones.

Canada. The Bélanger-Campeau proposal is equivalent to a commitment by ROC to pay interest in perpetuity on Quebecers' current holdings of Canadian dollars. Such a proposal would be more persuasive if Quebec could simultaneously make an irreversible commitment to use the Canadian dollar in perpetuity — but this is not something that Quebec could do.[18] The Bank of Canada remitted $2.4 billion in "profits" to the federal government in fiscal year 1990/91, of which Quebec's share under federalism is $0.6 billion. Since this sum would no longer accrue to an independent Quebec and since it is included as a positive item in net interest payments, we must add a further $0.6 billion to Quebec's deficit under sovereignty.

The Interest Rate Premium

The interest rate paid on the debt of a sovereign Quebec would be higher than the rate paid by the federal government today for two distinct reasons.

First, since government bonds issued by Quebec and other provinces currently pay a higher rate than government of Canada bonds, we would have to add some premium to the interest rate paid by the federal government even under the assumption that sovereignty *per se* would have no effect at all on interest rates. Recent quotes seem to indicate a difference of about 60 basis points between comparable Canada and Quebec bonds.

Second, sovereignty would impose an additional risk premium on both ROC debt and Quebec debt. Markets would face uncertainties regarding the future behavior and resources of these two new political entities — including uncertainty about whether Quebec would issue its own currency at some point in the future, as well as the future exchange rate of the Canadian dollar and, if it existed, a

18 This comment notwithstanding, there is considerable logic in the Bélanger-Campeau Commission's position on the Bank of Canada. We believe, however, that ROC would resist this position very strongly. The reader who disagrees may recalculate our projections accordingly, but the issue is not very important in the total scheme of things.

new Quebec dollar. For the purposes of our calculations, we assume a 100 basis-point risk premium applied to the federal debt inherited by Quebec.[19]

Consequently, the assumed overall risk premium relative to the interest rates assumed in the federal budget is equal to the sum of 60 plus 100 basis points, or 1.6 percentage points (see Appendix A for the actual interest rates assumed). The impact of this risk premium develops fairly gradually as old debt matures and new debt is issued.[20] The plausibility of these assumptions depends partly on the estimates of the size of the deficit. As we shall see below, the implied deficit is large, so that our assumption on the risk premium is probably conservative.

Summary

Figures 5 and 6, presented earlier in this chapter, plot the deficits and debt ratios of a sovereign Quebec under these assumptions. It can be seen that the deficit peaks in Year 3 at $16.5 billion and declines to $14.3 billion by Year 5. However, the dollar gap between the deficits under federalism and sovereignty rises in every year, from $4.5 billion in Year 1 to $10.0 billion in Year 5. The debt ratio, instead of trending down to 78 percent by Year 5, rises continuously to reach 97 percent of GDP in the final year. The figures also indicate the effect of cutting our estimate of the maximum impact of separation on the

19 Since we have applied no risk premium to current provincial debt or to the debt of Hydro-Québec, we assume implicitly that any such premium would be offset by government restraint that would maintain the constant $2 billion deficit on the "provincial" component of the budget.

20 There are two basic options with respect to the transfer of the debt. In one case, Quebec would issue its own new debt over a period of years and pay the proceeds to ROC. In the other case, ROC would remain the ultimate debtor, and Quebec would make payments of interest and principal to ROC. Although the risk premium would probably be larger in the first case, we are not forced to make any assumption on this issue. In the first case, the interest premium would show up in Quebec's own borrowing rate. In the second case, creditors would apply the premium to ROC debt, and Quebec would have to pay that premium on its share of the debt. Clearly, ROC and Quebec would have different preferences on this matter.

unemployment rate from 2 percent to 1 percent. The deficit peaks at $15.0 billion instead of $16.5 billion, while the debt reaches 94 percent of GDP rather than 97 percent by Year 5. Under the assumption of zero additional unemployment, the deficit peaks at $13.5 billion and the debt rises to 91 percent of GDP.

As already noted, Appendix A sets out the contribution of each factor to the evolution of the deficit and debt, and provides the reader with the information needed to calculate the effects of alternative assumptions. In general, the two most important factors are the operating-balance effect and the disruption effect coming from higher unemployment. These account for 60 percent of the additional debt due to sovereignty by the end of Year 3. Compound interest also exacts its toll, and the importance of the interest-rate premium rises over time. The mechanisms involving the Bank of Canada and out-migration are significant but less major.

Quebec's Margin for Maneuver

If the preceding analysis is even remotely on track, the government of a newly independent Quebec would immediately be faced with a very large deficit and thousands of dislocated workers. How would it choose to react? How would it be able to react? On the first question, one can engage in an academic debate on whether a federal state or a unitary state is better able to withstand pressures coming from special-interest groups. Or one might agree with Marcel Côté when he states that:

> Five thousand mad farmers are enough to get any government to back down in any industrial society, and that includes France, the United States, California, Quebec, Ontario, and B.C.[21]

The dislocation is likely to be highly concentrated by region and by industry — a factor that makes it harder for government to resist pleas for bailouts, protection, and special assistance.

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21 Quoted in *The Gazette* (Montreal), July 27, 1991.

It may be, however, that such considerations would be largely irrelevant. That is to say, no matter how Quebec might choose to react, its hands may be so tied that it would essentially have only one choice. Let us consider the policy levers in turn, recalling that in the period immediately following separation, the government of Quebec would be under intense international scrutiny.

- Assuming that, under a friendly separation, Quebec would continue to use the Canadian dollar, then the Quebec government would have no influence over interest rates, the money supply, or the exchange rate.
- As many economists and business people in Quebec have stressed, the new country would have to establish its fiscal credibility rapidly. Neither it nor its creditors would tolerate anything like the deficits and debt levels shown in Figures 5 and 6. We return to this point in a moment, but it seems that the Quebec government would hardly be in a position to conduct bailouts or provide special assistance — let alone undertake major spending increases as it did during the 1976–80 period.
- Finally, given the earlier analysis of U.S. pressures relating to the FTA, Quebec may be constrained in its industrial policy even if it had the money.

There are not many important economic policy levers left. The Quebec government could use fiscal policy to shuffle spending priorities or redistribute income or it could run a wages policy, but by and large these are things that Quebec can already do today. Paradoxically, then, having once acquired independence, the Quebec government would find that it had much less room for maneuver, or what might be called "economic sovereignty", than it had when it was a province. This point is reinforced as we turn now to the question of how Quebec would deal with its deficit.[22]

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22 This argument is also a central theme of Courchene, *In Praise of Renewed Federalism*.

Among the member countries of the Organisation for Economic Co-operation and Development (OECD), in recent years only Italy and Greece have run deficits as large as those shown in Figure 5 (relative to GDP). Only one of the countries shown in the Bélanger-Campeau Secretariat's debt comparisons had a debt ratio as high as what we project for Quebec in Year 1.[23] It is by no means evident that the Quebec government would be able to borrow $13.7 billion in Year 1 of independence — or even $13.0 billion under our more optimistic assumptions regarding unemployment — and it seems virtually certain that it would not choose to do so. The question, then, is not whether Quebec would undergo budgetary cutbacks, but rather by how much, over what time period, and in what areas. In general, we think, Quebec would have to undergo substantial cuts in Year 1; at the same time, it would have to launch a strict and credible plan to control its public finances over the medium term.

An Austerity Plan

As an illustration of the scale of the problem, we consider an austerity plan designed to cancel out fully the adverse budgetary effects of sovereignty. In other words, the Quebec government's budgetary reaction would be such that a sovereign Quebec would follow the same budgetary paths that are recorded for federalist Quebec in Figures 5 and 6.[24] Arguably, an assumed budgetary reaction on this scale is realistic, partly because international money markets would be so anxious, partly because Quebec's consolidated debt ratio is very high even in the absence of separation, and partly because the

23 This statement is also true after one makes allowance for the OECD accounting convention based on gross liabilities excluding pension liabilities. On this basis, the debt of a sovereign Quebec in Year 1 would be on the order of 70 percent of GDP — and rising — rather than the 80 percent shown in Figure 5.

24 For example, Figure 5 indicates that the difference between the deficit of a sovereign Quebec and the consolidated deficit of federalist Quebec is equal to $4.5 billion in Year 1, $7.1 billion in Year 2, and so on. Our assumed austerity plan is such as to reduce these differences to zero, with the result that the deficit of sovereign Quebec evolves in the same way as the deficit of federalist Quebec.

federal deficit projections seem more likely to be too low than too high.

To undo the negative budgetary shocks of sovereignty, the Quebec government would have to reduce its operating balance by the following amounts (the amounts in brackets correspond to the required cuts under the more optimistic case in which unemployment is lower):

Year 1	$4.5 billion ($3.9 billion)
Year 2	$6.6 billion ($5.3 billion)
Year 3	$7.4 billion ($6.1 billion)
Year 4	$7.2 billion ($6.1 billion)
Year 5	$6.7 billion ($6.0 billion)

In the less optimistic case, the government would have to cut expenditure or raise revenue by $4.5 billion in Year 1, by a further $2.1 billion in Year 2, and so on. The total required cut is $7.4 billion, or 4 percent of GDP by Year 3 — or $6.1 billion in the more optimistic case.

Turning now to the question of where the cuts would occur, it is crucial to recognize that *for every dollar of reduced government spending, the reduction in the government deficit will be very much less than one dollar.* This is because an independent Quebec would:

- have full responsibility for unemployment insurance and social assistance; and
- tax personal income at a marginal rate of around 45 percent rather than 23 percent — for an individual with taxable income between $28,000 and $50,000 in 1990.

Two simple examples will illustrate this point. First, if we take the case of a salary cut applied to civil servants and use the marginal tax rates mentioned above, then a $1,000 salary reduction will reduce the deficit by $770 for federalist Quebec but by only $550 for a sovereign Quebec. Second, if we assume that a civil servant earning $40,000 is fired and receives unemployment insurance for one year,

Table 3: ***A Possible Austerity Package for a Sovereign Quebec***
(billions of dollars)

	Spending Cut or Tax Increase	Reduction in Deficit
Spending Reductions		
15% salary reduction in public and para-public sectors	3.8	2.1
10% cut in all transfer payments	1.8	1.3
5% reduction in employment in public and para-public sectors	1.1	0.4
Subtotal	6.7	3.8
Tax Increases		
15% increase in consumption taxes	2.1	1.4
15% increase in personal income tax	3.5	2.4
15% increase in corporation tax	1.1	0.7
Subtotal	6.7	4.5
Total	13.4	8.3

the result is a reduction in the deficit of about $36,000 for federalist Quebec but only around $16,000 for a sovereign Quebec.[25]

Table 3 sets out a hypothetical six-point austerity plan. On the spending side, we assume a 15 percent pay reduction for the public and para-public sectors, a 10 percent cut in all transfer payments, and a 5 percent downsizing of the public sector. We see that, while the gross effect of these draconian actions is to reduce the deficit by $6.7 billion, the net reduction is disappointingly small at $3.8 billion.

25 Assuming that the civil servant becomes unemployed and receives, say, $16,000 in unemployment insurance, the budget saving to a sovereign Quebec would fall from $40,000 to $24,000. In addition, at a marginal tax rate of one-third, the drop in income from $40,000 to $16,000 would result in a tax loss of $8,000. Hence the net reduction in the deficit is $24,000 minus $8,000, or 40 percent of the gross reduction. For the federalist Quebec, on the other hand, the federal government pays all of the UI and loses half of the tax.

It should be emphasized that, while we take account of direct losses of tax revenue as discussed in the previous paragraph,[26] we make no allowance for any fiscally induced decline in economic activity that would cause further losses in tax revenue and increases in UI payments and social assistance. Given the need to make cuts approaching 5 percent of GDP, it is clear that such effects would be substantial.

The second half of the package involves a 15 percent increase in all tax rates: consumption taxes, personal income tax, and corporation tax. The gross effect of the tax increases would be to reduce the deficit by $6.7 billion, but the net effect would be less, possibly much less. How much less would depend on the strength of mechanisms involving reduced consumer and corporate spending, as well as an induced reduction in the tax base through increased out-migration of people and companies, increased crossborder shopping, a growing underground economy, greater tax evasion, and a reduction in hours of work. Some of these mechanisms would also involve increases in actual or recorded unemployment and hence higher government expenditures on unemployment insurance. It seems impossible to quantify all of these mechanisms in any credible way. For purposes of illustration, we simply *assume* that the net deficit reduction resulting from the tax increases would be two-thirds of the gross reduction. That is to say, ignoring higher UI expenditure, we assume that a 15 percent increase in tax *rates* yield a 10 percent increase in tax *revenues* and a 5 percent erosion of the tax *base*.

It can be seen that the package as a whole would yield an estimated $8.3 billion deficit reduction. Since we have ignored effects arising from lower economic activity, a package of this order of

26 The gross figures for both expenditure cuts and tax increases are based on the estimated structure of fiscal year 1990/91 taxes and expenditures of an independent Quebec as reported by the Bélanger-Campeau Secretariat — that is, including both current Quebec expenditures and the portion of current federal expenditures that would be undertaken by a sovereign Quebec. The net figures are based on the examples of the previous paragraph — except that we assume a marginal tax rate of 30 percent rather than 45 percent for transfer payment recipients.

magnitude might be required to achieve a target cut of $7.4 billion. Naturally, to the extent that one adjusts our assumptions in the direction of greater optimism, the size of the necessary budget cuts would come down.

Chapter 7

A Friendly Breakup: *Second-Round Effects*

Having estimated the size of the shock that would come from Quebec separation, we turn now to the propagation mechanisms or second-round effects. At this point, the study becomes more speculative in nature, and it will not be possible to provide any numerical estimates. We begin by describing a number of mechanisms that could influence the second-round response of the Quebec economy to sovereignty. Then, taking account of the special role of the French language in Quebec, we comment in rather general terms on how the process might work itself out in the case of Quebec.

The following considerations are likely to affect the second-round response of the economy of a sovereign Quebec:

- *Lower real incomes.* Our hypothetical austerity package indicates that Quebecers could face substantial reductions in real income over a period of at least five years. Income reductions could be delivered in a variety of ways, including higher taxes, reduced public services, and direct reductions in wages, salaries, and transfer payments. At the margin, such income reductions would induce further out-migration and a further erosion of the tax base, and they would also make it more difficult to attract qualified immigrants to Quebec.

- *Lower stocks of physical and human capital.* Plant closures and lower investment spending over a period of some years would result in a lower capital stock, which, in turn, would have longer-run implications for employment and income. If, as

seems likely, some of the most highly skilled and educated Quebecers would be among those who leave — or who choose not to return — then the new country could be faced with declining stocks of human as well as physical capital.

- *Economies of scale and size of the market.* One of the most important mechanisms in the positive feedback literature relates to the size of the market and economies of large-scale production. The initial decline in income and population would make the Quebec market less important and attractive, which could induce more firms to either leave or scale down their operations. Some firms from outside Quebec that were considering the establishment of a Quebec operation might decide not to come.

- *Complementarities.* Part of the reason why firms are attracted to large centers is the presence of other firms supplying complementary products — for example, specialized financial or other business services. The same idea applies to highly skilled individuals who are members of "teams" or "networks" of similarly skilled individuals. A negative shock that induces the departure of some of these firms and individuals could have "unraveling" effects, as the departure of complementary firms and individuals makes the place less attractive for those that remain. This point is discussed in greater detail later in this chapter.

- *An eroding tax base.* Higher taxes would lead to some erosion of the tax base. Also, out-migration would generally reduce the tax base by more than it would reduce the demand for public services, at least in the short run. However, there would also be a second-round effect on the tax base and tax rates arising from the various factors mentioned above.

This checklist of possible mechanisms indicates that the process is at least potentially circular and self-reinforcing. Some aspects of this circular process are depicted in Figure 7. The initial shock of separation results in higher taxes, lower incomes, out-migration, and lower

Figure 7: *A Possible Unraveling Process*

Quebec Separation
Out-migration
Higher Taxes, Lower Income
Lower Investment
Via Scale Economies and Complementarities
More Out-migration
Further Erosion of Tax Base and Higher Taxes
Further Loss of Jobs and Income
Third Round of Out-migration, Higher Taxes, etc.

investment. These effects then give rise to a second-round erosion of the tax base and an increase in tax rates, a second-round loss of jobs and income, and, as a result of scale economies and complementarities, a second round of out-migration. And so the process continues to the third round...

Language, Globalization, and "Centers of Excellence"

It is important to ask whether linguistic considerations would shield Quebec from the negative effects of these mechanisms. The case of nonfrancophones poses no problem to the analyst, since a glance at

our checklist indicates that it would apply to this group with great force. For example, we can apply the notion of complementarities to the anglophone community as a whole. As individuals, many anglophones might wish to stay in an independent Quebec, but if they believed that many other anglophones would leave and that there would be "no future" in Quebec for anglophones and their children and their institutions, then they might nevertheless feel forced to leave.

The degree to which these considerations would apply to francophones is both less obvious and more important for Quebec as a whole. It is true that migration rates for Quebec francophones are much lower than for other Canadians,[1] and presumably most of the difference can be explained by language. On the other hand, most of the best-educated, best-trained francophones are bilingual. Generally speaking, these people are as free to move as equally well trained anglophones. Moreover, it seems to us, current trends toward the "globalization" of "centers of excellence" are reducing the importance of both international boundaries and linguistic considerations for the most highly skilled people in the younger and middle generations of Quebecers.

By a center of excellence, we mean a formal or informal group of individuals whose work is recognized internationally. Such groups are likely to be found in universities and in such industries as microelectronics and computers, aeronautical engineering, pharmaceutical research, and telecommunications.[2] One important char-

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1 Over the 1981–86 period, for example, rates of interprovincial emigration were as follows: Quebec francophones, 0.6 percent; Ontario anglophones, 2.1 percent; Atlantic province anglophones, from 5.6 percent to 6.5 percent, depending on the province; Western Canada anglophones, from a low of 5.3 percent in British Columbia to a high of 9.1 percent in Alberta; and Quebec anglophones, 10.1 percent. See Marc Termote, "L'évolution démolinguistique du Québec et du Canada," in Quebec, Commission on the Political and Constitutional Future of Quebec (Bélanger-Campeau Commission), *Éléments d'analyse institutionnelle, juridique et démolinguistique pertinents à la révision du statut constitutionnel du Québec* [Background papers], vol. 2 (Quebec, 1991), pp. 315–316.

2 One example in the area of pharmaceuticals is Montreal-based Nordic Laboratories Inc., which is the Canadian head office for a U.S. parent company. According to *The Gazette* (September 14, 1991), the company, which has a team of 70...

acteristic of centers of excellence is the erosion of language barriers. In the academic world, for example, one observes that many Quebecers receive their graduate education in the United States, and the brightest members of this group seem no less enthusiastic than anglophones to accept jobs at leading U.S. institutions. Also, some of the top Quebec (francophone) companies conduct their recruitment internationally, and this is certainly true for leading departments in the academic world. To give one concrete example, of the 12 new professors hired by the Department of Economics at the Université de Montréal over the past five years, only four were native-born francophone Quebecers. Two of that department's professors — both native-born Quebec francophones — recently accepted jobs at leading U.S. institutions.[3]

A second characteristic of centers of excellence, whether in the business world or in academia, is the importance of teamwork. Colleagues who work well together are vital not only for the retention of existing members of the group but also for the recruitment of new members. This point, in combination with the "internationalization" argument just presented, implies that Quebec-based centers of excellence would not be immune from the shock of Quebec separation. Even if it were true that the Quebec-born team members were willing to sustain a very large income drop in the event of Quebec separation, this could not be said for the non-Quebecers. Hence, negative shocks could lead to an unraveling of the team, perhaps beginning with the departure of non-Quebecers and increasing difficulties with recruitment. It follows that the cost to a Quebec-born team member would involve not only a drop in income, but also a deterioration in the quality of the center, something

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Note 2 - cont'd.

...professionals, was attracted to Montreal by research incentives offered by the Quebec government and by the high quality of biomedical research in four Quebec universities.

3 That this is more than an isolated example of the weakening of language barriers is indicated by the comments of René Simard, in this volume. His comments also provide evidence indicating the strong national and international reputation of this department.

that could have a long-term negative effect on the individual's productivity and career. Moreover, Quebecers currently working in international centers outside Quebec would have the same double incentive not to return to Quebec: lower income and less-qualified colleagues.

In essence, all we are saying on this point is that Quebec is increasingly plugged into the international community and that Quebecers who are leaders in their fields are a part of the worldwide trend toward more international interaction and interdependence. Moreover, all indications point to a continuation of trends in this direction in coming years. If this much is granted, then one cannot assume that Quebec would be immune from the positive feedback mechanisms described above simply because most Quebecers speak French.

Chapter 8

Offsetting Factors: Economic Gains from Quebec Sovereignty

Up to this point, all of the economic effects of Quebec sovereignty that we have considered have been negative. In this last substantive chapter, we discuss two possible economic factors that could work in the other direction.

- *The capacity to control government spending and deficits.* Looking at either Ontario's $10 billion deficit or the state of federal finances today, one could make the argument that the government of Quebec has recently demonstrated a superior capacity to control its finances. Since sovereignty would give Quebec greater control over the debt for which it is ultimately responsible, some people might conclude that it would be better for Quebec to "jump ship" than to remain tied to a system that is drowning in debt.

- *Overlapping jurisdictions, policy coherence, and Quebec specificity.* Program spending by both levels of government in the same area can result in wasted resources and incoherent policy. Single Canada-wide policies may be inefficient from a Quebec standpoint if these policies do not take account of important differences between Quebec and "the Rest of Canada" (ROC). For example, the fact that rates of interprovincial labor mobility are much lower for Quebec than for ROC may imply differences in optimal policy in the general areas of human resources and

> training. A related argument is that sovereignty may give rise to greater cooperation among Quebecers and that this is likely to result in improved economic performance.[1]

It is clear that these points contain at least an element of truth, and it seems that they have a powerful influence in Quebec today. We begin our discussion with two general points.

First, it is essential to specify the alternative to a sovereign Quebec. At one extreme, the alternative might be a renewal of federalism incorporating constitutional changes that recognize Quebec as a distinct society, devolve substantial powers to the provinces, promote the Canadian economic union, and limit both the federal spending power and the size of federal deficits. At the other extreme, the alternative to a sovereign Quebec might be the status quo. Clearly, the force of the two pro-sovereignty arguments will depend partly on the deal that Quebec is able to get from ROC. The closer is this deal to the status quo, the more powerful will be the pro-sovereignty arguments related to federal deficits and overlapping spending powers.

A second and related point is also concerned with appropriate points of reference. The appropriate comparison is *not* between the Bourassa and Mulroney governments of today. Rather, taking fiscal policy as an example, the appropriate comparison is between: (i) the fiscal policy of the government of a sovereign Quebec from, say, 1994 onwards; and (ii) the fiscal policies of the provincial and federal governments of this same period, assuming some form of renewed federalism. Current and past behavior of federal and provincial governments are only relevant to the extent they help us predict the behavior of these hypothetical governments of the future.

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1 This argument has been advanced by Pierre-Paul Proulx, "Elements of a General Theory of International City Development: Context, Local Milieu, Networks, Linkages and Local-Regional-International Policies" (Paper presented to the Regional Science Association International Meetings, Boston, 1990); and idem, "Comment on M.G. Smith Paper" (Presented at the conference, "The Economic Dimensions of Constitutional Change," sponsored by the John Deutsch Institute for the Study of Economic Policy, Kingston, Ont., June 4–6, 1991).

Government Deficits

With these general points in mind, we turn now to a discussion of the two pro-sovereignty arguments, beginning with government deficits. We first consider the federal and Quebec governments of today and then turn to the more speculative question of future governments.

Substantial progress has been made in bringing federal finances under control since 1984. As can be seen from Figure 8, both federal program spending — that is, total expenditure excluding interest on the debt — and federal deficits have come down significantly from their 1984 peaks. Moreover, the figure indicates that reductions in federal spending and the federal deficit compare favorably with the corresponding reductions carried out by the government of Quebec — although both the problems inherited by the federal government in 1984 and the task that lies ahead of it are on a much larger scale.[2]

Recalling too that it was the Mulroney government that negotiated and implemented the Canada-U.S. Free Trade Agreement, we conclude that the current federal and provincial governments have similar economic priorities, notably in the areas of fiscal policy and outward-looking trade policy. While the same cannot be said of the present government of Ontario, with its $10 billion deficit, this does not constitute an argument for sovereignty so long as it is assumed that a sovereign Quebec would continue to use the Canadian dollar. Indeed, it makes more sense to draw the opposite conclusion — that Quebec would be better protected from negative shocks coming from Ontario if it remained a part of Canada than if it became a sovereign country.[3]

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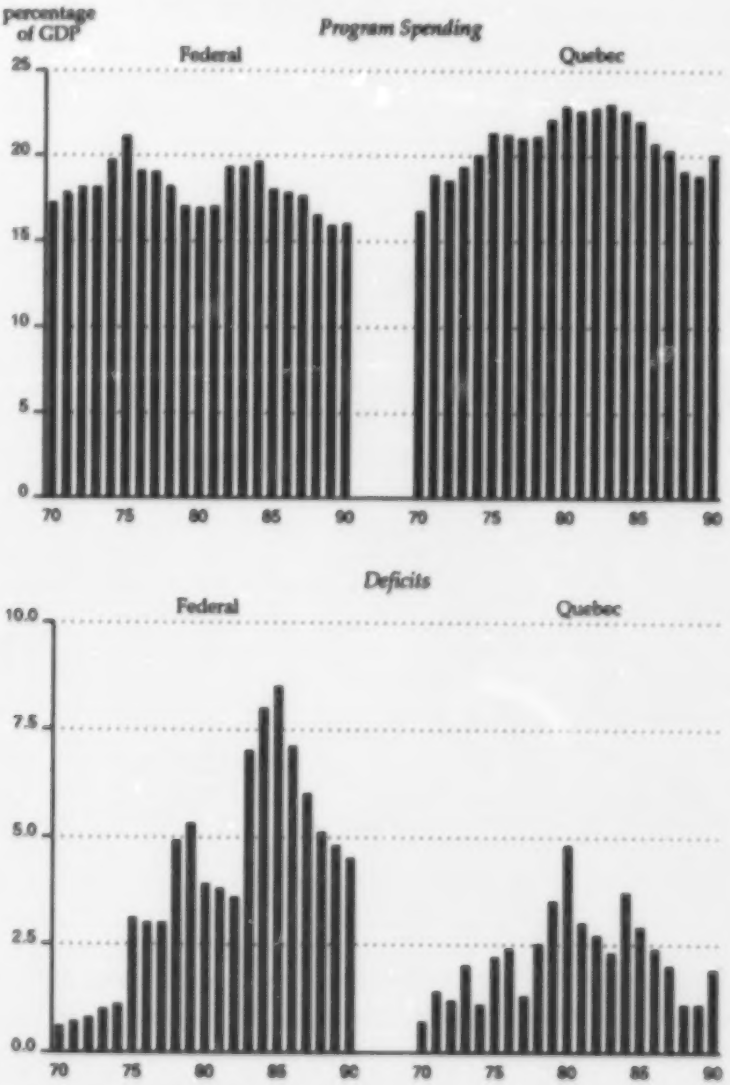
2 The Quebec deficit figures are from the Quebec budget of fiscal year 1990/91. The trends are very similar if one uses an alternative deficit measure that includes the municipal sector.

3 Given that a sovereign Quebec continues to be a part of the Canadian monetary union, the *economic* transmission mechanisms from the Ontario economy to the Quebec economy are the same under both sovereignty and federalism. However, the *political* transmission mechanism would change, as a sovereign Quebec would have less influence than before on the conduct of Canadian monetary policy.

Figure 8: ***Program Spending and Budget Deficits In Canada and Quebec, 1970–90***



Source: Federal and Quebec Budgets, various years.

As noted earlier, however, the basic issue involves the future rather than the present and the past, and the records of the Mulroney and Bourassa governments are relevant only to the extent that they represent good predictors of future policies. On such matters, one can only speculate. We offer three speculations, as follows:

- At a general level, if it is believed that high government spending and/or deficits are the result of a process involving the interaction between politicians and special-interest groups,[4] one can ask whether the power of special-interest groups is likely to be greater in smaller unitary states or in larger federal states. It seems the argument could go either way in theory, and no obvious patterns emerge from an examination of the post-war experiences of industrial countries.

- In a much more short-run perspective, one may ask whether the optimistic federal deficit forecasts are likely to be realized. Again, one cannot know for sure—and the past inspires limited confidence. But mention should be made of forthcoming federal legislation that will put dollar limits on program spending over the next five years. Also, it seems that, in recent months, Ottawa has been displaying a certain toughness with regard to public-sector salaries.

- Perhaps the most relevant issue is the "medium-run" question regarding both the likely stance of federal fiscal policy *after* the next federal election and the capacity of the hypothetical government of a sovereign Quebec to carry out the kind of austerity package that was described in Chapter 6. Of course, neither we nor anyone else can know the answers to these questions. It does seem clear, however, that the fiscal challenges facing a

4 For evidence indicating that special-interest groups have influenced provincial spending but not provincial deficits, see Irene K. Ip, *Big Spenders: A Survey of Provincial Government Finances in Canada*, Policy Study 15 (Toronto: C.D. Howe Institute, 1991).

newly sovereign Quebec would be an order of magnitude *greater* than the challenges facing the federal government today, whereas the fiscal problems of the Quebec government, within Canada, are an order of magnitude *less* than Ottawa's problems today. In other words, it would be dangerous to extrapolate from the fiscal successes of the Bourassa government to conclude that the government of a newly sovereign Quebec could handle the immensely larger fiscal imbalances that it would confront at a time of great political turbulence.

Overlapping Jurisdictions

Undoubtedly, there is a certain amount of waste and incoherent policy because of overlapping jurisdictions. While there is a need for some reform of the federal system, in the absence of such reform the natural economic questions concern the quantitative importance of the costs arising from overlapping jurisdictions. Where are these overlaps important? How much money would be saved by eliminating them? How does this amount of money compare with sums on the other side of the ledger — for example, the $1.9 billion net cost of lost equalization payments? What specific aspects of federal policy in the area of, say, manpower and training are contrary to Quebec interests, and by how much would matters improve if such policies were changed?

Not all overlaps are bad. For example, there is widespread agreement in the Quebec academic community that exposure to Canada-wide competition for research grants promotes excellence in Quebec-based research. Yet there are clearly costs associated with the administration of two sets of research councils rather than one. As illustrated by this example, then, the problem is not only to determine the costs of overlap, but, in some cases, the benefits as well. The costs would then have to be compared with the benefits. In short, informed judgment on these questions would require large amounts of information. To the best of our knowledge, most of the basic research on these matters remains to be done.

Summary

In moving from the short-run effects of Chapter 6 to the longer-run unraveling effects of Chapter 7, to the possible economic advantages of sovereignty described in this chapter, we shifted from matters that were reasonably concrete and at least potentially quantifiable to issues of a much more speculative and nonquantifiable nature. To a degree, further research in areas such as overlapping jurisdictions will permit more definite conclusions to be drawn. On the other hand, conclusions on long-run effects will by their nature remain largely unquantifiable, and much of the overall assessment on these matters will have to be left to the judgment of the individual reader.

Chapter 9

Conclusion

A modern, vibrant economy is usually able to digest the effects of gradually declining industries and other negative shocks without major disruption. Negative shocks that are large and abrupt and that come all at once may, however, trigger an "unraveling" process characterized by prolonged and protracted periods of high unemployment. The large and possibly permanent jump in the gap between the unemployment rates of Montreal and Toronto following the election of the Parti Québécois in 1976 provides evidence in support of this view. Whether or not the realization of Quebec sovereignty in the 1990s would lead to major additional dislocations of this kind would depend on both the size of the shock resulting from separation and the subsequent response of economic agents to that shock.

We began our analysis by making the crucial assumption that the process of Quebec separation would be "friendly" or non-acrimonious. Then, on the subject of the size of the shock, we examined the prospects in vulnerable areas and estimated the budgetary position of the Quebec government over the first five years of sovereignty. Because there is substantial uncertainty in these budgetary estimates, we set out all of the key assumptions in such a way that the reader could readily calculate the sensitivity of our estimates to alternative assumptions. The results for the deficit and debt with no policy response were shown in Figures 5 and 6 (in Chapter 6), and a possible "austerity package" designed to bring the deficit under control was outlined in Table 3 (also in Chapter 6). Our package indicated the need for very substantial tax increases and/or expenditure cuts lasting for the full five-year period of our exercise.

Although some readers might question whether a package on this massive scale would really be necessary, we believe that we are, if anything, erring on the side of optimism. Recall that there is no acrimony in this story. We have assumed no barriers to trade with either the United States or "the Rest of Canada" (ROC). We have generated no credit crunch or foreign-exchange crisis or major drop in investment, no mass exodus of people and capital from Quebec, no political crisis over territory. By and large, our assumed economic shocks lie within the range of recent experience — even though the political shock we are considering does not.

After estimating the size of the shock, the analysis turned next to the more speculative question of longer-run or second-round effects in response to this shock. We argued, first, that there would be a real possibility of a substantial "unraveling" of the economy. This would involve a circular self-reinforcing process of higher taxes, lower investment, and rising out-migration of capital and skilled people, leading to further rounds of out-migration and further rounds of higher taxes, lower public services, and lower investment. On the other hand, we also acknowledged that there are some potentially offsetting factors that could work in the direction of longer-run economic gains from Quebec sovereignty.

The overall implications of this work are clear. A failure to resolve Canada's constitutional crisis would be very bad for the Quebec economy and for the economic well-being of many Quebecers. While little has been said about the economic shock to ROC, we believe that the ROC economy would suffer, too — assuming, indeed, that an Ontario-dominated ROC could survive as a country.[1] If this conclusion is correct, we return full circle to the problems of

1 Some of the reasons why the ROC economy would suffer from Quebec separation are implicit in our analysis. For example, under a friendly separation, ROC would face a risk premium on its debt, and it would also face major risks in the renegotiation of the Canada-U.S. Free Trade Agreement and the possible reopening of the auto pact. Additional costs resulting from acrimony would be borne by both Quebec and ROC. More generally, we believe that the "whole is greater than the sum of the parts" and that a breakup of the country would impose further costs in such areas as Canada's negotiating power in international trade and the capacity of the country as a whole to respond to adverse economic shocks.

substance and process that were discussed at the beginning of the book. Economists, however, have no special expertise on those matters, and so we end with the hope that Canadians and Quebecers will find an honorable and lasting solution to their current predicament.

Appendix A

Quebec Budget Projections

This appendix provides supporting technical details on the budgetary projections summarized in the text. The major sources for this exercise are the federal budget of February 1991 and the report of the Secretariat of the Bélanger-Campeau Commission.[1] We begin with a brief reconciliation between the Secretariat's proposal regarding asset and debt sharing and our own procedures as summarized in Table 2, Chapter 6. We then present our budgetary projections as summarized in Figures 5 and 6, Chapter 6.

Reconciliation with Bélanger-Campeau

Table A-1 provides a reconciliation between our GDP rule and the Bélanger-Campeau Secretariat's proposal. We see, at the top of the table, that Bélanger-Campeau calls for Quebec to assume $66.3 billion of federal debt at a net (and gross) interest cost of $7.1 billion. Under the GDP rule, shown at the bottom of the table, Quebec assumes 23.4 percent of the gross debt, or $93.5 billion. Quebec's net interest costs amount to $10.1 billion in debt servicing, minus $0.9 billion in investment income, or $9.2 billion — that is, the

1 Secrétariat de la Commission sur l'avenir politique et constitutionnel du Québec, "Analyse pro forma des finances publiques dans l'hypothèse de la souveraineté du Québec," in Bélanger-Campeau Commission, *Éléments d'analyse économique pertinents à la révision du statut politique et constitutionnel du Québec* [Background papers], vol. 1 (Quebec, 1991), pp. 393-511.

Table A-1: *Quebec's Share of Federal Assets and Debt: A Reconciliation of the Bélanger-Campeau and GDP Rule Approaches*
(billions of dollars)

	Quebec's Share		
	Gross Debt	Gross Interest	Net Interest
The Bélanger-Campeau Secretariat's result	$66.3	$7.1	$7.1
Plus:			
1. Share of gross debt (23.4% vs. 22.9% of 399.4)	2.4	0.3	0.3
2. Share of pension liabilities (22.9% vs. 13.3% of 71.0)	6.7	0.7	0.7
3. Bank of Canada (10.3% vs. 0.0% of 22.3)	3.9	0.4	0.4
4. Asset sharing and valuation (22.9% vs. 11.7% of 129.2)	14.3	1.5	0.6
5. Total (1 + 2 + 3 + 4)	*27.3*	*2.9*	*2.0*
Equals:			
GDP rule (23.4% of 399.4)	93.5	10.1	9.2

Notes: The gross interest figures are illustrative only, and are obtained by applying the average rate of 10.7% (from Bélanger-Campeau) to the corresponding debt. In the case of the asset-sharing figure, $0.9 billion in investment income — excluding the share of the Bank of Canada remittance (from Table 2) — has been subtracted from the gross interest figure of $1.5 billion to arrive at the figure of $0.6 billion.

A minor additional adjustment amounting to $0.3 billion has been incorporated into the Bank of Canada debt figure as specified above. This reflects the Bélanger-Campeau Secretariat's consolidation of the balance sheets of the federal government and the Bank of Canada.

Sources: Québec, Secrétariat de la Commission sur l'avenir politique et constitutionnel du Québec, "Analyse pro forma des finances publiques dans l'hypothèse de la souveraineté du Québec," in Bélanger-Campeau Commission, *Éléments d'analyse économique pertinents à la révision du statut politique et constitutionnel du Québec* [Background papers], vol. 1 (Québec, 1991), Table 2.

$6.6 billion shown in Table 2 plus the $0.6 billion that Quebec would not receive from the Bank of Canada.

It can be seen that four items account for the difference between the Bélanger-Campeau figure of $7.1 billion and the GDP rule figure of $9.2 billion. These items may be explained as follows:

- If all other aspects of the GDP rule remain unchanged but we adopt the Bélanger-Campeau figure of 22.8 percent instead of 23.4 percent, Quebec's debt share would fall by $2.4 billion.
- In the case of the $71 billion of pension liabilities to federal civil servants, Bélanger-Campeau claims that Quebec's share is only 13.3 percent (instead of 22.8 percent), on the grounds that 13.3 percent of federal employees are currently Quebec residents. However, today's pension liabilities are due to *past* services rendered by civil servants and the armed forces to Canadians as a whole. There seems no reason to allocate the value of those services on the basis of province of residence.
- The next item has to do with the Bélanger-Campeau proposal to reduce Quebec's debt for reasons relating to the Bank of Canada as was discussed in the text.
- The last and most complicated issue involves the valuation and sharing of federal assets. Essentially, the Bélanger-Campeau position may be explained as follows. It begins by giving a high estimate of the value of federal assets based on replacement cost. Then, it says, Quebec will take considerably less than its rightful share of these assets. This leaves Quebec with an asset "shortfall", for which, says Bélanger-Campeau, it will be compensated by an equal reduction in its share of the federal debt. However, given the figure for total federal property income, Bélanger-Campeau's high valuation of federal assets implies a very low rate of return on these assets. In essence, then, Bélanger-Campeau is proposing to sell $14.3 billion in assets yielding an average annual return of around 3 percent for a $14.3 billion reduction in its debt on which it would pay, say, 10 percent. Clearly, this would be a nonstarter from the point of view of "the Rest of Canada".

Quebec Budgetary Projections

The deficit and debt projections are set out in Table A-2, and we now provide a line-by-line description of that table. Lines 1 to 3 give Quebec's consolidated deficit under the federal regime. Line 1 is

23.4 percent of the predicted federal budget deficit, and line 2 is a constant $2 billion per year for the provincial deficit. Line 3 gives the total.

Lines 4 to 8 set out our assumptions on the budgetary shocks due to sovereignty. Line 4 is the operating balance effect, which, according to Bélanger-Campeau, was $1.6 billion in fiscal year 1990/91. We allow this figure to rise at approximately the same rate as Quebec's nominal GDP, which is assumed to rise at the same rate as projected for Canada in the federal budget. Line 5, labeled "Dislocation", reflects the assumption that the unemployment rate is above its base level by the following amounts (in percentage points): Year 1, 1 percent; Years 2 and 3, 2 percent; Year 4, 1.5 percent; and Year 5, 1 percent. It is assumed that every additional percentage point on the unemployment rate implies a 1.5 percent reduction in GDP and revenues.[2] This, together with additional unemployment insurance or welfare expenditure at an average of $16,000 per person, gives a figure of $2.6 billion for fiscal year 1992/93. The figures for other years are calculated in the same way.

Line 6 is out-migration and, as noted in the text, we assume that an additional 2.7 percent of the Quebec population leaves the new country by Year 3. Because some of the out-migration might involve companies and individuals with above-average incomes, we assume that the tax base falls somewhat more than the population — by 3.5 percent instead of 2.7 percent. Program spending is assumed to fall by 1.5 percent. The difference between 2.7 percent and 1.5 percent reflects the importance of fixed costs, but we do not know whether we are over- or under-allowing for this factor. Line 7 sets out the loss of revenue from the Bank of Canada, as described in the text.

The remaining two items involve the interest premium (line 8) and the additional interest costs that would accumulate as a result

2 A traditional "Okun's Law" number of around 2 would imply that a 1 point increase in the unemployment rate translates into a 2 percent reduction in GDP. We have chosen the lower figure of 1.5 percent because the "Okun's Law" number is likely to be lower to the extent that the unemployment is due to plant closures rather than to a general cyclical downturn.

Table A-2: *Quebec Budget Projections, fiscal years 1990/91 to 1994/95*
(billions of dollars)

		1990/91	1991/92	1992/93	1993/94	1994/95
Deficit under federalism						
1.	Deficit: Federal account	7.1	7.1	5.5	3.9	2.3
2.	Deficit: Provincial account	2.0	2.0	2.0	2.0	2.0
3.	Consolidated deficit	9.1	9.1	7.5	5.9	4.3
	(as a percentage of GDP)	5.6%	5.5%	4.4%	3.2%	2.2%
Sovereignty shocks						
4.	Operating balance	1.5	1.7	1.9	1.9	2.0
5.	Dislocation	1.2	2.5	2.5	2.0	1.4
6.	Out-migration	0.4	0.8	1.2	1.0	0.8
7.	Bank of Canada	0.5	0.5	0.5	0.7	0.7
8.	Interest premium	0.7	1.0	1.2	1.5	1.7
9.	*Subtotal*	*4.5*	*6.5*	*7.4*	*7.2*	*6.7*
10.	Additional interest	0.0	0.5	1.4	2.4	3.3
11.	*Total impact (9 + 10)*	*4.5*	*7.1*	*8.8*	*9.6*	*10.0*
Deficit under sovereignty						
12.	Deficit (3 + 11)	13.6	16.3	16.5	15.5	14.3
	(as a percentage of GDP)	8.6%	8.9%	8.4%	8.3%	7.2%
Debt (end-of-year)						
13.	Provincial debt	46.0	48.0	50.0	52.0	54.0
14.	Share of federal debt	91.0	98.0	104.0	108.0	110.0
15.	Consolidated debt under federalism (13 + 14)	137.0	146.0	154.0	160.0	164.0
	(as a percentage of GDP)	84.0%	84.0%	83.0%	80.0%	78.0%
16.	Debt impact of sovereignty	4.5	11.6	20.4	30.0	40.0
17.	Debt under sovereignty (15 + 16)	141.5	158.0	174.0	190.0	204.0
	(as a percentage of GDP)	86.5%	90.5%	94.0%	96.0%	97.0%
Interest rate on the debt						
18.	Under federalism	12.5%	11.1%	10.5%	10.0%	9.5%
19.	Under sovereignty	12.8%	12.2%	11.8%	11.8%	11.1%

of the higher deficit under sovereignty (line 10). The amount of the interest premium can be seen from lines 18 and 19 of the table, which set out the interest rates under the federal and sovereignty regimes. The federal interest rate is debt charges as a percent of beginning-of-year net federal debt. The sovereignty rate incorporates our assumed risk premium at a speed that reflects Bélanger-Campeau assumptions as taken from the federal budget.

The additional interest (line 10) is charged only on earlier years' addition to the debt, not for the current year. It may be recalled that the total deficit on provincial account remains fixed at $2 billion, with spending or revenue adjustments implicitly going on in the background to offset effects of dislocation, higher interest rates, and so on. Line 11 gives us the assumed total addition to the base case deficit due to sovereignty, and line 12 is the level of that deficit.

Finally, lines 13 to 17 set out end-of-year debt levels, as derived from the deficits just calculated and beginning-of-year debt figures for fiscal year 1990/91 of $83.8 billion and $44 billion for the federal and provincial accounts, respectively. The provincial component of the debt increases by $2 billion per year (line 13). The share of federal debt (line 14) rises by the amount of the federal component of the deficit (line 1) each year. The sum of lines 13 and 14 is equal to Quebec's consolidated debt under the federal regime (line 15). The sovereignty debt impact, shown in line 16, is equal to the cumulation of the sovereignty deficit impacts, shown in line 11. For example, the debt impact in 1990/91 is equal to line 11 for that year; the debt impact in 1991/92 is equal to the deficit impact for 1991/92 ($7.1 billion) plus the deficit impact for 1990/91 ($4.5 billion); and so on. Finally, the total debt under sovereignty (line 17) is equal to the debt under federalism (line 15) plus the sovereignty debt impact (line 16).

Appendix B

Path-Dependent Behavior in Economic Geography

In this somewhat technical appendix, we attempt to provide economists with an analytical basis for the argument that the "shock" of Quebec separation may reverse decades of path-dependent behavior in the Montreal or Quebec economy. A reversal of path dependence could cause the Montreal economy to become "unraveled", with serious economic consequences for the Quebec economy.

The analytical treatment relies heavily on bits and pieces of three recent papers by Paul Krugman, who, more than any other recent theorist, has examined the role of path dependence in economic geography, or the location of production in space.[1] Krugman's papers are particularly relevant and interesting because two of them are motivated by an attempt to explain a parallel U.S. phenomenon: the persistence of the U.S. "manufacturing belt", located in the

1 Paul Krugman, "History and Location: The Case of the Manufacturing Belt," *American Economic Review* 81 (May 1990): 80–83; idem, "Increasing Returns and Economic Geography," *Journal of Political Economy* 99 (1991): 483–499; and idem, "History versus Expectations," *Quarterly Journal of Economics* 106 (May 1991): 651–667. Other relevant papers on path dependence include Brian Arthur, "Competing Technologies, Increasing Returns, and Lock-in by Historical Events," *Economic Journal* 99 (March 1989): 116–131; idem, "Positive Feedbacks in the Economy," *Scientific American* 262 (February 1990): 92–99; Kevin Murphy, Andrei Shliefer, and Robert Vishny, "Industrialization and the Big Push," *Journal of Political Economy* 97 (1989): 1003–1026); and Paul Milgrom, Qian Yingyi, and John Roberts, "Complementarities, Momentum, and the Evolution of Modern Manufacturing," *American Economic Review* 81 (May 1991): 84–88. A precursor of path dependency is the "backward and forward linkages" described by Albert O. Hirschman, *The Strategy of Economic Development* (New Haven, Conn.: Yale University Press, 1958).

northeastern sector of the country.[2] The third paper attempts to distinguish cases in which "history" sets the initial conditions that (via path dependence) determine outcomes, from the cases in which expectations (via self-fulfilling prophecy) determine outcomes.[3]

Krugman attempts to explain the persistence of the U.S. manufacturing belt, despite the westward movement of the agricultural and mineral production throughout the late nineteenth and early twentieth centuries. Krugman's explanation of the core-periphery pattern that developed in the United States — and Canada as well — is based on (Marshallian) external economies.[4] The role of external economies is particularly important for the manufacturing sector which exhibits (internal) economies of scale. It is the *interaction* of increasing returns — for example, through monopolistically competitive setup costs — transportation costs, and demand that provides the basis for path-dependent behavior.

With population initially distributed highly unequally across the land — because of the endowment provided by initial settlement — manufacturers that experienced economies of scale prefer to serve the national market from one (or a very few) locations. To minimize transportation costs, locations are chosen with large local demand. These are the population centers that are precisely where a majority of manufacturers choose to locate.[5] The result is a circular process in which population is attracted to locations where manufacturers provide jobs, and manufacturers are attracted to population centers where the local demand for their goods is greatest.

Montreal almost certainly benefited from the type of circularity described above. The rise of manufacturing in the late nineteenth century, in part attracted to Canada by the National Policy Tariff of 1879, found a ready demand and labor force in Montreal and the

2 Krugman, "History and Location"; and idem, "Increasing Returns."

3 Krugman, "History versus Expectations."

4 An alternative approach in which complementarities, rather than scale economies, are important is used by Milgrom, Qian, and Roberts, "Complementarities, Momentum."

5 Krugman, "History and Location."

surrounding hinterland. As the manufacturing base grew, more labor was attracted, and as the population grew, more manufacturing was attracted. Thus, Krugman's path-dependent explanation for the U.S. manufacturing belt applies as well to the development of Montreal as a center.

Krugman recognizes that history (initial endowment) cannot fully explain economic geography.[6] For one thing, the process is very backward looking. An alternative hypothesis is that "the willingness of firms to invest depends on their expectations that other firms will invest."[7] In the presence of increasing returns and market-size effects, an externality is created. Expected future returns depend on the investment or factor-allocation decisions of others, which depend on expectations of future earnings. The stage is set, at least potentially, for the presence of a self-fulfilling prophecy. Between two (or more) equilibria, the economy ends up at the one at which most people believe it will end up. The result is a case of multiple equilibria in which the outcome is entirely based on a self-fulfilling prophecy.

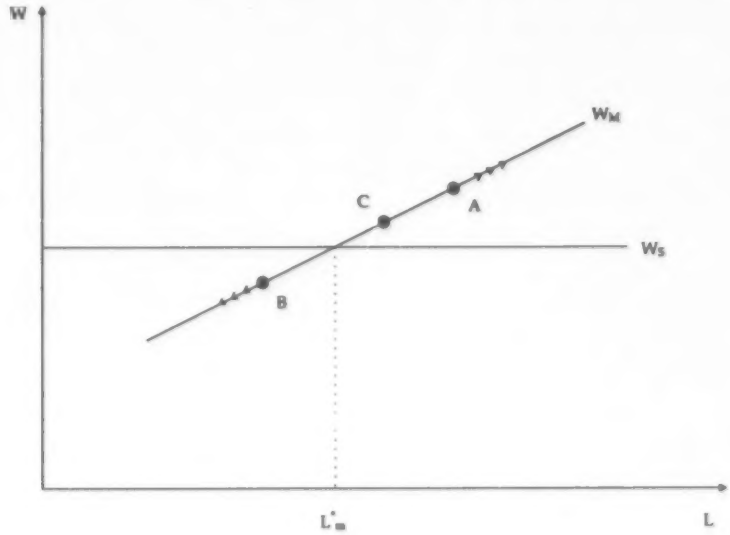
Krugman provides a simple theoretical illustration of the roles of history and expectations in determining the location of manufacturing production — or any other type of production in which external economies will have an effect on industry-specific costs and productivity. We begin with a very simple model in which expectations play no role. We then introduce a role for expectations. Suppose, in the spirit of Krugman,[8] an economy produces two goods that it sells at fixed prices on world markets: a good S (for nonmanufacturing related services), which is subject to constant returns and a constant wage; and a good M (for manufactured goods), whose

6 Krugman, "History versus Expectations."

7 Ibid., p. 654. This hypothesis was originally suggested in the work of Paul Rosenstein-Rodan, "Problems of Industrialization of Eastern and Southeastern Europe," *Economic Journal* 53 (1943): 202–211; and recently formalized by Murphy, Schliefer, and Vishny, "Industrialization and the Big Push."

8 Krugman, "History versus Expectations," pp. 655–657.

Figure B-1: ***A Simple Illustration of the Krugman Model***



production is subject to increasing returns. It is assumed that the larger the labor force engaged in the production of M, the higher the labor productivity and wages in that sector.

Figure B-1 illustrates the possible equilibria. Workers, who are assumed to choose to work in the sector in which wages are higher, will choose to work in the S sector if initial conditions place L_m below L_m^*. They will choose the M sector if $L_m > L_m^*$. Unless initial conditions (history) establish L_m precisely at L_m^*, the economy will tend toward an equilibrium in which nobody works in the M sector or everyone works in the M sector. If, for example, the economy's initial position is at point A (which lies to the right of L_m^*), then, as indicated by the arrows, employment in the manufacturing sector will be rising over time.

Now suppose some unfavorable shock causes manufacturing employment to fall from, say, point A to point B. In this case, we get "unraveling", since the shock is large enough to place the level of

employment to the left of its critical value L^*_m. If the shock had been smaller or if the initial level of manufacturing employment had been higher, then the shock might have left employment to the right of its critical value L_m^* — say, at point C. In this case, the setback would have been only temporary: after the shock had been absorbed, manufacturing employment would begin to rise once again. This example, while oversimplified in many ways, illustrates the point we make in the text: if a negative shock is large *relative to* the historical advantages of an established center, then we may observe cumulative decline or a process of unraveling. The ultimate outcome is determined by the shocks and by the initial conditions, where the latter are determined by history.

This model can be made more realistic in a number of ways. One possibility is to introduce intersectoral adjustment costs. In this case, Krugman shows, the central role of history remains intact, but manufacturing employment no longer necessarily gravitates to either all available workers or none of them. However, as Krugman is quick to note, the introduction of adjustment costs suggests that the intersectoral reallocation of factors involves an *investment* decision. In turn, an investment decision implies that future as well as current returns matter. The introduction of future returns further implies a role for *expectations* and the necessity for a more dynamic analysis.

We do not reproduce Krugman's dynamic analysis but sketch the flavor of his results. It is possible that history dominates expectations, in which case the results are like those of the simple model shown in Figure B-1. It is also possible, however, that expectations dominate history. In this case, manufacturing employment can expand ever upward (or drift downward toward zero) simply because majority industry opinion expects that this will happen. Krugman isolates three factors that determine whether history or expectations determine the outcome: the interest rate, the importance of the external economies, and the speed of adjustment. The lower is the interest rate (the more investors take the long view), the more important are external economies, and the faster is the speed of adjustment, the more likely is it that expectations will dominate history.

It is not easy to relate Krugman's analysis to the impact, if any, of Quebec separation on industrial location. Apart from the fact that it is a highly abstract model, it is difficult to determine whether history will dominate expectations or vice versa. If history dominates and if the shock is small, Montreal and Quebec's initial endowment should carry the Quebec economy over the inevitable bumps associated with separation. If expectations dominate history, one has to choose among multiple equilibria, reflecting very different final positions. Sovereigntists would argue, we suppose, that a separate Quebec, free of the "burdens" of Canadian involvement, would make the new country a handsome place in which to invest and develop. Capital, human as well as financial, would flow in. Alternatively, critics might argue that if expectations dominate history, Quebec would lose resources to ROC and/or to the United States as a result of a combination of pessimism about Quebec's financial position and the historic westward pull of resources. Capital, human as well as financial, would flow out.

Despite these uncertainties, the model does allow us to highlight the roles and interaction of three crucial factors: "history", or the established position and advantages of Montreal and Quebec; the "shocks" that are likely to hit a newly independent Quebec; and "expectations", which can play an important role in either amplifying or attenuating the initial impact of the shocks. We do not, however, deal with expectations in a systematic fashion, since it seems difficult to say very much that is concrete on the subject.

Parting as Friends: *Analytical Elements of a Counter-Scenario*

Mario Polèse

The title of the study by John McCallum and Chris Green, "Parting as Friends," does not adequately capture its contents, which read more like a list of economic catastrophes that would occur if Quebec were to leave: out-migration, loss of jobs, tax hikes, a fall in Quebecers' standard of living, and so on. One can barely imagine what a pessimistic scenario based on an unfriendly breakup would look like. In short, what one must conclude from this study — according to the authors — is that, even in the best of circumstances, things would get worse (for Quebec) if Canada were to split into two states.

The Limits of Economic Analysis: Speculation and Obviousness

This much is obvious: Separation would be costly. Furthermore, it is not necessary to engage in original analysis to understand that uncertainty, political instability, redrawing of borders, and constitutional crises are rarely beneficial to a country's economic health. One only needs to ask a banker. Which investor or entrepreneur prefers uncertainty? Any analytical model that takes expectations into account to predict the behavior of economic units will conclude by definition that political stability — or the predictability of policies — is always the most efficient solution.

This being said, once we cast aside the sovereignists' naively optimistic scenarios, everything else becomes speculation to some degree. How can one analyze the real cost of independence? Here, one must leave the field of economic expertise — as the authors also admit. To predict the behavior of men and women in times of crisis or of profound changes then becomes an undertaking more akin to an intellectual game — which can often be interesting — than to an economic analysis proper. Even the most competent and well-intentioned economist must then base his or her "analysis" on often very impressionistic facts or assumptions. The study by McCallum and Green inevitably suffers from this problem.

The authors state that the (relative) decline of Montreal's economy stems, in large part, from the political and sociolinguistic evolution of Quebec society since the 1960s. I share their diagnosis, which, in any case, is based in part on some of my own work. However, when they conclude that an actual separation — not just the threat of one, as has been going on for the past 20 years — would probably have an equivalent or worse effect, they make a logical jump that the reader is not compelled to follow.

A Reference Model for Computing the Opportunity Costs of a Friendly Breakup

To calculate the "real" cost — including opportunity costs — of a friendly breakup of Confederation, one must compare this scenario to a more realistic alternative scenario, which would include the costs that Montrealers would have to bear in any event.

For at least the past 20 years, Quebec has lived in a state of fragile "equilibrium" — to use a word from the economic jargon — buffeted by constitutional and linguistic crises. Furthermore, the possibility that Quebec would one day declare itself a sovereign state is beginning to be recognized as a plausible, even probable, event by some in the international community — see, for example, recent issues of *The Economist* — although this does not mean that people

in international financial circles view this as a favorable development or that they agree with Quebec independence.

On the assumption that such people are rational economic players, however, one must assume that this information affects their decisionmaking process. McCallum and Green are not the only ones to have recognized that Quebec sovereignty has become a real possibility. This information belongs in the public domain. Businesses with significant assets in Quebec ought to be taking it into account. In short, economists can assume that the Montreal region is already paying — or has already paid — a good part of the price of independence, even if was never to take place. Some would say this is a typical *québécois* way of neither having your cake nor eating it.

Furthermore, the threat of Quebec independence is modulated in time: a referendum in about 18 months (from the time these comments were written), perhaps another year before sovereignty is proclaimed, and so on. All in all, this leaves us with a fairly lengthy period of negotiation and reflection — some would say confusion — before finally knowing where we are going to end up. To illustrate, this can be compared with the integration of Hong Kong and China a few years hence, an event which seems to me to be much more fraught with danger.

Let me then reiterate my reasoning. It is not illogical to think that Quebec (especially Montreal) would pay most of the price *before* independence, not after, no matter what takes place. Some might then conclude that if Quebecers are paying the price for it anyway, they might as well do it (sovereignty).

As every good economist knows, the calculation of the cost of independence should — thanks to the notion of opportunity cost — take into account, as a reference point, the cost of the most realistic alternative scenario. This alternative scenario — I exclude the dream of a Quebec quietly returning to the Canadian fold — would have to take into account the costs that the Montreal region would bear in any event, given the probable evolution of the political situation. For example, given the normal alternation of political parties in power, it is more than probable that the Parti Québécois will one day be

returned to power in Quebec, no matter what the constitutional scenario, which would trigger a new shock. This is a cost that, all in all, cannot be avoided. Likewise, the pre-referendum period — assuming there is a referendum — inevitably will result in costs, no matter what the constitutional outcome.

The Exodus of Head Offices

To assist us in this intellectual game of alternatives, let us take as a departure point Table 1 of the McCallum-Green study, focusing on the head offices item.

It is reasonable to assume that a reorganisation of these head offices has already been under way for the past 20 years at least, reflecting the sociopolitical (and linguistic) realities of Quebec. It is indeed this "reorganisation" that is, in part, the cause of the relative decline of the Quebec economy. This reorganisation will continue, no matter what the constitutional scenario. To take two examples, the Montreal-based head offices of the Bank of Montreal and the Royal Bank of Canada already resemble regional offices (for Quebec) more than truly Canadian head offices. Most of the central functions of both banks have already left for Toronto. It is therefore probable that the net additional impact of sovereignty on employment and head offices in Montreal — that is, beyond existing trends — would be rather marginal. If, furthermore, one postulates that the two states (Quebec and "the Rest of Canada", or ROC) agree to preserve a monetary union and an integrated corporate legal framework, with the possibility of binational incorporation — remember that one is talking here of a friendly breakup scenario — it is possible that the net impact of Quebec sovereignty, relative to the "normal" employment trends in head offices, would be imperceptible.

The same reasoning applies, to varying degrees, to head offices and other offices of federal Crown corporations — Air Canada, Canadian National, the Federal Business Development Bank, Via Rail, the CBC, Canada Ports Corporation, and so on. Air Canada,

following air traffic demand, has been increasing its presence in Toronto for several years. If one remains faithful to the hypothesis of a truly friendly breakup, however, one cannot exclude the possibility that the two states would want to keep some of these corporations intact — as autonomous corporations under joint property — after the Scandinavian Airways model, for example. Again, given the hypothesis, the net real effect of separation on employment levels in Montreal would be rather marginal. At the limit, one could even imagine (or speculate) that employment would rise in Montreal in some sectors, in the event of a decentralization of some functions — such as Canada Ports and airport management — from Ottawa to the regions.

The Exodus of Anglophones

Can we really be sure, as McCallum and Green seem to argue, that Quebec sovereignty would cause a significant increase in anglophone (and allophone) out-migration relative to "normal", predictable trends? Again, if one remains faithful to the idea of a friendly breakup, all types of accommodations are possible between two states in order to make life easier for individuals: interchangeable passports (or even a common passport), recognition of double citizenship, guaranteed freedom of movement, reciprocal protection for linguistic minorities, and so on. In this scenario, then, English-speaking Quebecers might not feel compelled to make an immediate move, and they would retain all their rights as Canadians if they so chose. One can suppose that many nonfrancophones who feel unwelcome in Quebec — and who are already considering leaving as a realistic option — will leave in any event in the years to come, no matter what the outcome of the constitutional process. The others will adopt a "wait-and-see" attitude. At the moment, everything depends on how the situation unfolds in the long run. Beyond this, one can only speculate or engage in political science fiction.

Transition Costs Compared with Long-Run Costs: A Counter-Scenario

In the long run, would a friendly breakup bring a more stable and fulfilling equilibrium than there is now, and for which Canadians are already paying a price (for example, the risk premium on government bonds)? If the answer is yes, the transition costs of Quebec separation might be worth bearing. How can one know, if one cannot predict the conclusions of such a process? Who can predict history? McCallum and Green venture implicitly to do so, however, particularly with their scenario of "unraveling" and "second-round effects", which translates, in the final analysis, into the collapse of the Quebec economy, especially following an acceleration of the brain drain.

Here again, it is possible to devise a counter-scenario that would lead to very different results, especially for Quebec. This scenario, which is frankly an optimistic one as far as Quebec is concerned, relies on the hypothesis that Canada without Quebec (ROC) would be a much more unstable country than Quebec.

Let us assume that Quebec keeps its territorial integrity — notably following accords with aboriginal nations within its borders that would no doubt be to their benefit. Then, after a few transition years, Quebec finally acquires the reputation of a modern, moderate, well-run and democratic state. Let us further assume that post-independence governments are, in general, pro-United States and pro-business without necessarily being right wing, along the lines of some European countries. But the biggest change can be seen in internal linguistic relations, which have become entirely harmonious — that is, a nonissue. Sovereign Quebec, now secure in its status as a francophone nation, allows the English language to play an important role (the vice-premier is always an anglophone), to such a degree that bilingualism in the Montreal region is *de facto* more widespread than at the time of linguistic tensions. Quebec is even proud of "its" anglophones — Quebec governments endlessly sing the praises of English-speaking McGill University (one could not find the equivalent in Paris).

ROC, on the other hand, undergoes a much more difficult transformation: political tensions (Ontario versus the rest), regional disparities that are even more evident since Quebec's departure (the Atlantic provinces versus the rest), a geographic gap that undermines national unity, linguistic minorities (Acadia, Ontario) feeling left out in an overwhelmingly anglophone Canada, a poorly located national capital (the West demands that it be moved to Winnipeg), some provinces also threatening to leave, senate reform remaining unresolved, and so on. In short, ROC remains at the constitutional crisis stage. To give an even greater bang to this scenario, one can assume that postrupture governments are, in general, nationalist — that is, given to anti-American rhetoric — and leftist leaning. Relations with Washington and the business sector are often tense. The good old days of "boom times" in Toronto are over.

If this scenario of the political evolution of ROC and Quebec were to unfold, even partially, the "unraveling" hypothesis for Quebec would no longer hold. On the contrary, in this counter-scenario, Montreal could become a center of attraction for young scientists and researchers in search of a different and dynamic milieu. Those anglophones who had adopted a wait-and-see attitude would not leave.

A Call for Analytical Humility

There is no rigorous test to assess the likelihood of the counter-scenario that I have just imagined, any more than it is possible to test the validity of some of the (often implicit) scenarios that underpin the McCallum-Green study. My comments should not be seen as an attack on the study; rather, they are meant as a reminder of how fragile our assumptions are once we leave the field of economic analysis proper. For example, why would the Canadian textile industry — with at least as many jobs in Ontario as in Quebec — not continue to seek trade protection? Many plants in the aerospace and other industrial sectors in Montreal are owned by Canadian or U.S. companies; would these not seek to protect the value of their assets? How can one take into account the possibility that Quebec would

use its new immigration powers to offset the impact of people leaving?

If there is a rupture, there inevitably would be costs to bear. In that sense, the federation remains the preferred option from an economic standpoint; stability is always preferable to instability. However, the reworking of a stable and permanent political union remains, precisely, a political question.

A Comment

Pierre Fortin

A friendly breakup is a contradiction in terms. If Quebec ever were to secede from Canada — whether in 1993 or in 2003 — there *would* be acrimony and tough bargaining. In fact, Quebec has not gone yet, and the impatience and occasional hostility toward its demands are already strong and rising. The real question, therefore, is not whether the breakup would be friendly — it would not — but whether, in the ensuing negotiations, interests would by and large dominate passions. Although they do not put it this way, one can interpret John McCallum's and Chris Green's "friendly" scenario as answering this question affirmatively. Coming right after Patrick Grady's apocalypse scenario,[1] their approach seems both more balanced and more sensible. I generally agree with its thrust.

The authors' simulation methodology for calculating the short-run effect of sovereignty on public finances is particularly helpful, although one may not necessarily agree with every number reported. Quebec would object strongly to paying the seigniorage right twice. It would also take strong exception to their asset-sharing assumptions. Particular institutional mechanisms — such as a joint organization to manage the federal debt accumulated before separation — could make the interest-rate premium smaller for both countries. And several favorable factors — such as a fall in the Canadian dollar, tight social control over inflation, and loan guarantees for the repurchase of companies on sale — could mitigate the magnitude and

1 Patrick Grady, *The Economic Consequences of Quebec Sovereignty* (Vancouver: Fraser Institute, 1991).

duration of the interest premium and of the economic slowdown. Given the string of assumptions they make on the division of the debt that are not particularly favorable to Quebec, I would, of course, advise Premier Robert Bourassa not to hire McCallum and Green to help in the negotiations with Canada. But this underlines one quality of their work: the assumptions are made clear and are therefore easier to criticize.

At any rate, even more favorable assumptions than theirs could lead to a government deficit of over 7 percent of GDP in Year 1 of a sovereign Quebec — McCallum and Green get 8.5 percent. This is much too high. Radical cuts would be required to keep the debt-to-GDP ratio under control: perhaps $2 billion immediately, and another $2 billion in the two following years. The first round could come easily from spending cuts: all those who claimed that Ottawa was *really* mismanaged and that duplications were widespread would be under pressure to prove their point. The second round of spending cuts would no doubt be harder to achieve. In addition to the probable downsizing of the international assistance and defense budgets, the $20 billion combined budget for education, employment, and income security would undergo tight scrutiny for every feasible rationalization. The authors are, of course, quite right to emphasize the key importance of deficit control immediately after separation.

The three possible outcomes of the present round of constitutional discussions are: a friendly reconciliation, a forced reconciliation, or breakup. The first is the most desirable, but I fear it is also the least likely, because Canadians outside Quebec perceive that Quebec will never be happy and will keep asking for more anyway. (Actually, Quebec has been asking for less and less in the past 15 years, and it has obtained nothing but unilateral reduction of its constitutional powers.) Canadian opinion will be stiffly unyielding to Quebec — as well as open to First Nations' claims.

Of the last two outcomes, the reluctant-reconciliation scenario is the more likely in the short run, and the worst. It is the more likely because there is still much anxiety in the province about economic

numbers such as those of McCallum and Green — and even mine.[2] It is doubtful that Quebec would decide to become sovereign in the midst of recession and stagnation. The scenario is also the worst because it really means that Quebec would not be a team player in Canada, that conflict would linger, and that it would probably secede in five, ten, or fifteen years, when some unexpected political event upsets the country once again. By then, Quebec presumably would have corrected many of the weaknesses that the Gradys, the McCallums, the Greens, and others would have been kind enough to identify, and would therefore feel more secure about going it alone with minimal economic pain. (Of course, we could have avoided all this mess if the Meech Lake Accord had made it through.)

I am less enthusiastic about the authors' analysis of the long run, which, in essence, argues that the short-run costs of sovereignty could turn out to be long-run costs. The basis for this view, I gather, is economists' recent discovery of the science of economic geography and of statistical "unit roots" in GDPs.

An alternative view of Quebec's economic development starts with the observation that the province suffered two big shocks in the past quarter century: the collapse of its old manufacturing sector, and the exodus of its old anglophone economic elite. As McCallum and Green rightly remind us, these shocks sent Quebec — and Montreal, in particular — into relative economic decline. However, the more important facts are that the productivity gap between Ontario and Quebec is slowly being closed, and that the employment gap stopped widening a decade ago and has now also begun to fall.[3] The double blow Quebec suffered did not transform it into a big

2 See Pierre Fortin, *Les conséquences économiques de la souveraineté du Québec: analyse exploratoire* (Study prepared for the Association canadienne-française pour l'avancement des sciences, September 1991).

3 According to data from the Conference Board of Canada, overall labor productivity (GDP per person employed) in Quebec was about 7 percent smaller than in Ontario in 1990, compared with 15 percent smaller in 1966. The employment differential between the two provinces rose from 45 jobs per 1,000 people (of working age) in 1966 to 90 jobs in 1982, but declined to 72 jobs in 1990. (The 1991 figure will be a recession-distorted 60-job gap.)

Atlantic Canada, but instead encouraged entrepreneurship, an outward-looking mentality, and social consensus.

Industrial adjustment is not over. It is long and painful. The high birth rate and growth rate of new businesses are still offset by the high death rate of old businesses. But one can reasonably predict that, as the economic transition is completed, the death rate will return to a more "normal" level, while the birth rate will remain high. Then, employment growth will accelerate, and the Montreal-Toronto unemployment rate differential that McCallum and Green so rightly emphasize will finally decline. While they read Krugman, I read Sauvy, whose basic argument is that economic progress is often stimulated, not arrested, by adversity, threat, and challenge.[4] Think of Japan and Germany, whose economies were destroyed in World War II. The costs of transition to sovereignty would add to Quebec's economic problems in the short to medium run. We could do without them, but they are unlikely to change the long-run picture.

If it occurs, sovereignty will be a political act of God, not a rational decision made after balancing the economic costs and benefits. The useful contribution economists can make then is to enumerate and quantify these costs and benefits as well as they can — so that if voters come to sovereignty anyway, they will have a better grasp of what to expect and will fight back the incipient costs accordingly. This is exactly what Professors McCallum and Green — and others in the C.D. Howe Institute's "The Canada Round" series — do and why they deserve our gratitude.

4 Alfred Sauvy, *Théorie générale de la population*, 2 v, 3rd ed. (Paris: Presses universitaires de France, 1964–66).

A Comment

François Vaillancourt

The study by John McCallum and Chris Green is an interesting exercise in examining the economic consequences for Quebec of a friendly breakup with Canada.[1] It suffers, however, from a gloom-and-doom view of the world and from the exclusion of an analysis of the benefits for Quebec of such a breakup. In my comment, I will address both issues. Before doing so, however, let me note two things.

First, I do not know if I am one of the few francophone economists to whom the authors refer, but I have always maintained in my work on the economics of language and on constitutional arrangements that there are costs both to Quebec's being a French-speaking society on an anglophone continent and to its becoming a sovereign state.[2] I also believe that these costs are small (language policies) or transitory (sovereignty).

Second, I believe that significant resources are being wasted in Quebec and "the Rest of Canada" (ROC) on constitutional issues. I would like to see these resources put to a more productive use through a stable solution. One such solution is sovereignty or its

1 I would like to thank the authors for asking me to comment on earlier drafts of their study.

2 See François Vaillancourt, "La Charte de la langue française: un essai d'analyse," *Canadian Public Policy* 4 (1978): 284–308; idem, "Réponses aux questions posées par la Commission sur l'avenir politique et constitutionnel du Québec," in Quebec, Commission on the Political and Constitutional Future of Quebec [Belanger-Campeau Commission], *Les avis des spécialistes invités à répondre aux huit questions posées par la Commission* [Background papers], vol. 4 (Québec, 1991), pp. 1117–1133; and idem, "English and Anglophones in Quebec: An Economic Perspective," in a forthcoming volume on linguistic minorities in the C.D. Howe Institute's "The Canada Round" series.

equivalent in powers within a Canadian shell. This is the solution I favor, for reasons exposed in detail elsewhere[3] and having to do with the fact that language is human capital. Another solution is a renewed federalism acceptable to a majority of Quebec residents — and to my mind 51 percent is legitimate either for or against sovereignty — along with the enforcement of laws on sedition against anyone publicly advocating sovereignty for Quebec, with a stiff (five-year?) minimum jail term. In other words, Quebecers should be asked to choose between sovereignty now or never. One may add that 51 percent of Quebec residents implies about 60 percent of francophones and that such a majority is adequate since (i) Quebec is more their historical homeland than it is for anglophones and (ii) they have no other residence option while anglophones do.

The principal thesis of the McCallum-Green study is that Quebec nationalism — particularly in its Parti Québécois manifestation from 1976 to 1985 — reduced economic activity in Quebec. This is surely true, but the evidence the authors offer for this is weak: a comparison of unemployment rates between Montreal and Toronto and between Quebec and Ontario. In addition, this period was also marked by a significant improvement in the socio-economic status of francophones with respect to anglophones, as is evident by:

- the increase in the francophone ownership of Quebec's economy from 51 percent in 1970 to 61 percent in 1987;
- the increase in the share of Quebec management jobs held by francophones from 65 percent in 1971 to 78 percent in 1986; and
- the reduction in differences in mean labor income between unilingual anglophones and unilingual francophones from 59 percent to 29 percent from 1970 to 1985.

Hence the "reconquest" of the Quebec economy by francophones has both costs and benefits. It is a long-term phenomenon that will

3 François Vaillancourt, "The Division of Powers in Canada: Theory, Evidence and Proposals" (Paper presented to the conference, "Economic Dimensions of Constitutional Change," sponsored by the John Deutsch Institute for the Study of Economic Policy, Queen's University, Kingston, Ont., June 4–6, 1991).

probably continue until 2010, when the education levels of Quebec francophones may become similar to those of Ontarians.

Having made their historical point, the authors then go on to identify 12 vulnerable areas. Unfortunately, this grab bag is heterogeneous. Their strongest case is probably for head offices that would not remain in Quebec post-sovereignty; indeed, this process has been under way since 1970. On the other hand, they appear to assume no alternative employment for dairy farmers in Quebec, who, if faced with losing a third of their market, may well turn to production of beef or pork. Similarly, textile employees may be re-employed in other activities or, being largely allophones, may leave Quebec.

The authors' other strong point is migration, but this is a double-edged sword. Assume, as they do, that about 250,000 people — that is, 80,000 households — leave. This would vacate good-quality housing, reducing the rental/ownership cost to remaining Quebecois substantially. If all these households left behind a home previously valued at $150,000 but sold for only $100,000, this would be a $4 billion shift of wealth that would primarily benefit francophones. A transfer of this nature, but not of this magnitude, occurred in 1976 and 1977. This would also reduce the need for new urban infrastructure and might lead to a reduction in the duplication of public services.

More generally, quite a few of the potential effects — on the engineering industry, the aluminum industry, Quebec Inc., the automobile industry, and defense-related industries — are linked to U.S. behavior. While it would be naive to believe that, in its treatment of Quebec, the United States would take into account that Quebec supported free trade while Ontario did not, it would also be naive to assume that the United States would have such a well-informed target list. In addition, Quebec's concessions on cultural industries made possible by the language barrier — although less valuable because of it — and the desire to avoid instability would probably affect U.S. policies.

It is interesting to note that when the authors calculate the effect of their sovereignty scenario on the Quebec budget, it never exceeds

5 percent of GDP. I would have put it at around 2–3 percent given efficiencies, synergies, and so on, but in both cases these are reasonable costs for building an independent Quebec.

The authors suggest a mix of spending cuts and tax increases to counter the impact of sovereignty on Quebec's budget. Note that they completely exclude the borrowing option, even internal borrowing. If one reduces their impact scenario slightly and allows some additional borrowing, then one obtains fairly reasonable cuts in public spending — including on wages[4] and employment — and increases in taxes.

Finally, turning to the long term, the authors raise the possibility of a slow-growth scenario. While this may be possible, as the history of Uruguay shows, I would argue that it is unlikely. What is more probable is a once-and-for-all drop in Quebec's GDP over the transition, followed by a resumption of the usual growth path or perhaps even a higher one owing to francophones' full control of internal economic variables.

To conclude, the authors argue that sovereignty, if acquired abruptly, could impose high costs on Quebec. I, too, believe that it would impose costs, but that these costs would not be as high as the authors think. Moreover, they ought to have subtracted out the costs of continuing constitutional uncertainty. In some sense, the authors can be seen as not opposing (perhaps supporting?) the slow but steady increase in the powers, and thus the sovereignty, of Quebec that has been going on since 1946 — provincial income tax (1954); Caisse de dépôt et placement (1966); immigration powers (1977); financial institution reform (1980s). Meech Lake (1990) would have been the next step. Such a long transition period similar to that suggested for optimal tax reform has the benefit of reducing losses in assets for those adversely affected by the reform. It may not be optimal, however, for those who benefit from it.

The authors, in their preface, ask fellow economists to assess the quality of their analysis. I found it weak. It could have been

4 Something I suggest in Vaillancourt, "Réponses aux questions."

strengthened if the authors had concentrated on the most likely costs — federal transfers, out-migration of head offices and anglophones — and dropped speculative items. It also might have been useful to examine the costs and benefits to ROC of breaking the Canadian shell, to lay the basis for a cost-benefit analysis of acquiescing to Quebec's demands.

A Comment

Pierre-Paul Proulx

It was with considerable reluctance that I accepted the invitation from John McCallum and Chris Green to comment on their paper, because it is not always opportune to criticize colleagues with whom one hopes to work someday, and because I find it a chore to repeat some of the analyses I have written, published, or presented in public speeches over the past two years or so.

Let me nevertheless begin by revealing my underlying preferences and biases, as McCallum and Green have done, for I have no illusions about the effects of ideology and socio-cultural-linguistic characteristics on my analysis and that of McCallum and Green — although I dispute their views about the absence of professional ethics of francophone economists, as we shall see later. In essence, I maintain that both asymmetric federalism — possibly symmetric *ex ante*, but definitely asymmetric *ex post* — and sovereignty-association are viable but ill-defined solutions to the attempts to address problems that have much more to do with the myriad factors that affect people's desire to live and work together than with the details of the Constitution or incomplete academic economic models on the cumulative growth and decline of regional economies.[1] I differ with McCallum and Green in believing that sovereignty-association, while involving more short-run pain than renewed federalism, *could*

1 See P.-P. Proulx and G. Cauchy, "Un examen des échanges commerciaux du Québec avec les autres provinces canadiennes, les États-Unis et le reste du monde," in Quebec, Commission on the Political and Constitutional Future of Quebec [Bélanger-Campeau Commission], *Éléments d'analyse économique pertinents à la révision du statut politique et constitutionnel du Québec* [Background papers], vol. 1 (Quebec, 1991).

— I am not saying *would*, since that is a function of some of the issues I raise later — make for greater medium and longer-run gain for all citizens who choose to stay in Quebec. This is all speculative, but much of the outcome depends on the positions of citizens in "the Rest of Canada" (ROC) and Quebec.

I understand fully that more than one method can be used to examine the economic implications of a change in Quebec's political status, but the authors could have chosen a better one. I would have opted for — and adapted to analyses in economic, not political, space — the frameworks many are using to study the effects of economic integration in Europe. It would have been helpful if the authors had discussed the effects of comparative advantage that lead to a narrowing of income gaps among regions — or a widening, in the case of Quebec and ROC. They also could have examined the agglomeration effects or economies of scale, both static and dynamic, on regional development. The net result of these effects could then be introduced into models stressing the cumulative aspects of economic growth — a feature of the McCallum-Green model — to pick up the effects of changes in initial conditions on Quebec's future growth path.[2] The authors also could have referred to the extensive literature on the effects of "1992" in Europe to develop a conceptual model that would have been more useful than the Krugman model. Let me reiterate the comment I made a year ago on some of the Krugman papers: such simplified models, while promising, have had to be left on the design table because they do not incorporate some of the important determinants of growth and decline of economies and have not been fit empirically to the real economy. Several of my papers[3] on the relative growth and decline of Montreal and Toronto

2 See P. De Grauwe, "The 1992 European Integration Program and Regional Development Policies," in a forthcoming volume entitled *Essays in Honour of Bela Balassa*.

3 See, for example, P.-P. Proulx and J.F. Proulx, *Montréal, Ville mondiale, nord-américain et québécoise: croissance, déclin et comparaison avec Toronto* (Montreal: Institut d'Étude des Villes Internationales, January 1990); and idem, *Montréal dans l'économie nord-américaine et mondiale* (Montreal: Institut d'Étude des Villes Internationales, February 1990).

and Quebec and Ontario also would have been relevant to the McCallum-Green study. The distinction between direct effects resulting from the variety of influences of a sovereignty scenario and indirect effects that reflect the particular provincial and regional characteristics of Quebec and ROC would also been helpful.[4]

Although I shall not develop the point here,[5] I maintain that the growing mobility of goods, services, and factors of production — including capital, information, and people — is making the provincial and even the national political unit of less and less relevance to an examination of the causes of economic development within them. All provincial economies are going north-south and international. Goods and services are traveling further afield, and geography is a diminishing, but still important, determinant of economic development.

That the method McCallum and Green have chosen is of some relevance to the short-run transition costs is not at issue. What I find more surprising and limiting is their failure to choose to model these costs with a fully developed macroeconomic model, as DRI Canada,

4 See A. Lesage and C.P. de La Rochefordière, "Sensibilités régionales à l'achèvement du grand marché européen: méthodologie et étude de cas," *Revue d'Économie Régionale et Urbaine* 1 (1990).

5 It is examined at length in reports I am preparing for Quebec's Ministry of Finance and in four recent papers: P.-P. Proulx, "L'évolution de l'espace économique du Québec, la politique économique dans un monde de nationalismes et d'interdépendance, et les relations Québec-Ottawa," in Bélanger-Campeau Commission, *Les avis spécialistes invités à répondre aux huit questions posées par la Commission* [Background papers], vol. 4 (Quebec, 1991); idem, "Quebec: From a Borderland to a Borderless Economy? Whither Quebec in Canada, North America, and the World," Cahier 9109 (Montreal: Université de Montréal, Département des sciences économiques, 1990); idem, "Primary and Secondary Trade between Canada and the U.S.: A National, Regional and Provincial Overview with Particular Reference to International Trade in the Borderlands," Cahier 9008 (Montreal: Université de Montréal, Département des sciences économiques, 1990); and idem, "What Happened to Globalization, the GATT, and the Canada-U.S. Free Trade Agreement, and Their Effects on Canadian Trade Policies?" (Paper presented to the conference, "Economic Dimensions of Constitutional Change," sponsored by the John Deutsch Institute for the Study of Economic Policy, Kingston, Ont., June 4-6, 1991, Mimeographed).

for example, has done.[6] Moreover, they do not introduce into their analysis elements suggested by more recent theoretical and empirical work on economic integration, the determinants of innovation, strategic planning by firms, network analysis, and factors that influence the location of economic activity in an increasingly continentalized and globalized economy.

The overlap between economic space and political space relevant to strategic planning by firms is diminishing, while the importance of networks and international-interregional competition and complementarities is growing. These trends render McCallum's and Green's analysis of limited relevance, especially for any attempt to clarify the implications of sovereignty in the medium and longer runs — the most relevant time frames given the nature of the decisions involved.

Let me now briefly comment on particular passages in the McCallum-Green study.

The authors emphasize the natural continental forces that are pulling resources and population west and south, as opposed to the forces of positive feedback that favor established centers. Under the recent federal constitutional proposals, these latter forces would still favor Ontario (particularly Toronto), in that Ottawa would be the only level of government constitutionally authorized to undertake regional development (Article 121, 3a). How? By means that make a mockery of all attempts to arrive at an identifiable sharing of powers! McCallum and Green refer to the role of the federal government in transferring resources and economic activity from west to east. My history book and my examination of more recent patterns of involvement tell me, however, that the federal government has also had much to do with pulling resources west. Have I misunderstood some of the objectives of the now-defunct "National Policy? Natural continental forces have, in fact, been pulling resources north-south much more than west. Moreover, the extent of the westward pull is not as

6 See R.B. Fairholm, "Paradise Lost," *Canadian Market Outlook: Regional Focus* (Summer 1991).

pronounced in Canada as in the United States, as Mario Polèse points out.[7] My reading of province-state trade flows over the longer run — particularly over the more recent 1976–87 period — indicates little dynamism in interprovincial trade, the bulk of which is between Ontario and Quebec, and significant dynamism in north-south and offshore trade for all provinces.[8] And the lack of dynamism in east-west trade within the Canadian common market is only slightly affected by interprovincial barriers, according to many economists.

The rate of return on working to reduce interprovincial trade barriers is much less than that involved in attacking U.S. market and international barriers. Accordingly, I argue that maximization of GDP in Canada as a whole does not follow from national policies that promote east-west mobility and adjustment. Instead, it comes from an approach that builds on the strengths of each region and province in its own, very different economic space, continentally and internationally. After all, is a trade policy appropriate for British Columbia entirely relevant to the Atlantic provinces? I support all attempts to reduce barriers to the free flow of resources among provinces, but I believe that other policies are more relevant and useful for those interested in keeping the country together and maximizing its GDP. I also maintain that the General Agreement on Tariffs and Trade (GATT), the Canada-U.S. Free Trade Agreement, a potential North American free trade area, modifications to the Multi-Fibre Arrangement, technological change, and changes in strategic planning by firms in response to these factors are sufficiently powerful in their effects on interprovincial barriers (and provincial development) that scarce resources should be devoted to other matters.

The analysis by McCallum and Green is limited because it lacks an appreciation of the past, current, and anticipated factors that help one to understand the development of Quebec's economy and, therefore, the effects of sovereignty on it. McCallum and Green say

7 Mario Polèse, La thèse du déclin économique de Montréal, revue et corrigée," *Actualité Économique* 66 (June 1990): 133–146.

8 Proulx, "Primary and Secondary Trade between Canada and the U.S."

at the beginning of Chapter 2 that they "agree with Pierre Fortin and other francophone Quebecers that if separation is to be avoided, [ROC] will probably have to 'swallow Meech'." I am, however, one francophone Quebecer who argues that Meech combined with certain articles of the 1982 repatriation make for more centralization than is desirable given the approach to economic development that I believe is in order.

I also take issue with McCallum and Green when they assert that "the messages received from francophone economists on the economic consequences of separation have been upbeat. Negative messages received from anglophones or from francophones who are known to be federalists are often dismissed as threats or as federalist propaganda" [Chapter 2]. Where, then, do I fit, with my June 1991 scenario in which I suggest that sovereignty, although potentially positive in the medium and long run, could result in net transition costs ranging between $1,000 and $2,000 per Quebecer over several years?[9] I note that all the estimates announced since then fall within the broad range of 3–10 percent of GDP that I suggested. And I am sure that I am not alone among francophone economists in agreeing that the DRI Canada estimates are a respectable attempt to use conventional methods to chip away at our ignorance of the costs and benefits of sovereignty. In no way can this be considered a threat or federalist propaganda. Can it really be, as McCallum and Green suggest, that "[t]he strategy, then, is to threaten sovereignty and to increase the credibility of that threat by painting rosy pictures of the economic consequences of Quebec separation" [Chapter 2]? Is it not possible that the ethics of some francophone Quebec economists — and some anglophones, too — might be rather more professional than McCallum and Green seem to imply by such a statement?

I am most encouraged by the authors' statement that increasing attention should be devoted to studying the reasons for the rise and fall of nations, regions, and cities — a subject of particular relevance to the study of the potential effects of Quebec sovereignty. I have

9 Proulx, "What Happened to Globalization?"

written extensively on this topic, and I do not propose to attempt to summarize my findings here.[10] Suffice it to say that an explanation of such growth and decline calls for a renewed conceptual framework that, in its present form, involves elements of:

- international trade theory (comparative costs);
- industrial organization theories and strategic planning literature wherein absolute cost differentials and networks, positioning, relative position, and critical masses come into play;
- regional development theory, which can contribute insights relevant to province-state trade and development in free trade and tariff-free crossborder economic space; and
- sociology, psychology, and political science, among other disciplines, to understand synergies, "paradiplomacy", and so on.

In particular, the conceptual framework consists of the following:

- an examination of the causes and effects of globalization and localization, one manifestation of which is an emphasis on economic space as distinct from political space;
- a focus on the working of what is called the "milieu", a term by which economists mean the horizontal and vertical synergies within regions among firms, trade unions, universities, and local, regional, and other levels of government — "Quebec Inc." is an example of this;
- a determination of the nature of linkages between firms and governments in the region and firms and governments elsewhere in the world — hence the emphasis on networks, foreign direct investment, joint ventures, and strategic alliances among firms and governments, both at the local level and internationally; and

10 The interested reader can examine my conceptual model of location of economic activities in integrated economic space in P.-P. Proulx, "Cadre conceptuel et éléments théoretiques pour l'analyse de la localisation et du développement économique: le cas des villes internationales," *Revue Canadienne de Sciences Régionales* (forthcoming).

- an assessment of the role of governments at the local and regional levels and, increasingly, at the supranational level — for example, the European Community, the Group-of-Seven, the GATT, and other bilateral and plurilateral arrangements.

A reading of the effects of globalization has led economists to believe that it is through cohesion and a dynamic milieu, and with the significant and growing involvement of cities and regions, that countries can compete successfully in the increasingly integrated economies of blocs or niches, some of which — financial intermediation, for example — are now worldwide.

A renewed and decentralized federal system could allow for such local synergies in different cities and regions of Canada. However, many of the proposals for a renewed approach to economic development call for centralization, not only of those policies that need to be harmonized with international standards, but also of those policies dealing with the quality of human resources, innovation, and so on. My model calls for significant linkages and an important provincial and local-regional role in the development of education, employment training, and infrastructure for the efficient flow of goods, services, capital, and information. The model also implies significant autonomy in developing inputs or content — that is, the "software" — and the pooling of jurisdictions and sovereignties to determine norms and standards — that is, the "hardware".

McCallum and Green argue that "much of the semi-permanent increase in unemployment can be explained by the threat of separation in combination with the limited mobility of labor. Low labor mobility can itself be explained by a combination of linguistic considerations and the availability of relatively generous unemployment insurance and social assistance" [Chapter 5, footnote 8]. The reference to lower labor mobility is an appropriate recognition of the place preference of francophone Quebecers and some of their aboriginal and anglophone neighbors. It also brings to light why francophones — who account for just 2 percent of the population of North America — are so group conscious, why they stress the importance of linguistic and, I would add, cultural considerations and collective

rights, and why they are less interested in the mobility-adjustment model with which McCallum and Green seem to agree. Critical masses are essential for sociocultural, linguistic, and economic viability in the modern open and interdependent world. Strategic trade theory and public economics tell us that lower mobility leads to the internalization of externalities and thus provides the motivation for a more significant role for the public sector in Quebec than in most of North America — hence Quebec Inc.

I believe that strategic planning by firms — many of which are moving toward global, transnational strategies in response to the pressures of globalization and localization — calls for a different approach to the discussion of the relationships between economies of scale and the size of the market than that used by McCallum and Green. Firms are no longer constrained to operate in their local or regional market. When coupled with the effects of new, more flexible technologies, these realities make the importance of product-scale economies of less importance — although they certainly are fundamental for some products and are obtained by global strategies. That Quebec is now a relatively closed economy by provincial standards is not at issue. That it is striving to go international and that, if sovereign, it would inevitably be involved in more international activities than it is now — which would benefit Montreal and its economic space — is also relevant to an appreciation of the problems we are discussing.

I agree fully with the observation by McCallum and Green that "Quebec is increasingly plugged into the international community and...Quebecers who are leaders in their fields are a part of the worldwide trend toward more international interaction and interdependence" [Chapter 7]. That is the third component of my model at work. Networking and strategic alliances are necessary activities for access to markets and to technologies and knowledge, and for the pooling of the risks and costs of research and development. Quebec has a way to go in developing its policies and programs to promote such activities. From my study of networking in Europe, however, I believe its returns are positively related to the existence of a dynamic

milieu, the second element of my model. In this respect, Quebec has a step up on ROC and much potential for further growth.

John McCallum and Chris Green have made an interesting contribution to informed debate on a fundamental issue. One of their most important suggestions is the need to undertake research on the determinants of the growth and decline of cities and regions. I hope we shall have the opportunity to work together on some of the many aspects of that issue, which is most relevant to the attainment of the sociological, economic, linguistic, and cultural objectives of peoples and their governments.

A Comment

René Simard

At the request of John McCallum and Chris Green, my comments concern only their discussion of second-round effects of a Quebec secession. Their postulates are correct, in the sense that at the level of what has become known as "centers of excellence," linguistic barriers fall and notions of critical mass and intellectual environment become major factors of attraction. But other factors should not be neglected. Thus, it is most likely that a sovereign Quebec would remain a free and democratic society, and Montreal, which already ranks highly among the world's cities for its quality of life according to a recent study sponsored by the United Nations, would likely retain this distinction.

The assumptions that the authors derive from these postulates are realistic, but they show only one side of the coin — that is, the consequences for Quebec of a friendly separation from Canada. Yet the same postulates and hypotheses could be put forward for Canada in the event of a friendly breakup with Quebec. A country cannot have a third of its cultural, intellectual, geographic, and other resources[1] amputated without it resulting in upheavals among the intellectual and scientific elites found in its centers of excellence. I submit that while Quebecers are aware of the stakes, Canadians — that is, those outside Quebec — have no idea of the repercussions of a separation, even a friendly one.

The Department of Economics at the Université de Montréal is an interesting case study of a center of excellence, for several reasons. Most of the professors who teach there received their doctorates from

1 The reader will forgive me this simplification of the shares involved.

prestigious universities in the United States or in Europe. According to outside experts who have recently assessed it, the department ranks as one of the top five in the country and provides national leadership in both econometrics and transportation. Indeed, the Centre de recherches en développement économique, which is connected to the department, has just obtained the "center of excellence" designation from the Canadian International Development Agency.

Can we predict what would happen in the event of a friendly separation by Quebec? Any conclusion is bound to be rash, and indeed the authors take care not to make the attempt. Suffice it to point out, for example, that two francophone Quebecers recently left the Department of Economics for other prestigious universities and that this took place in the context of a united Canada. This fact alone seems to show that the political context is not a significant factor — or at least not the only factor — influencing the mobility of international elites.

The Contributors

John McCallum is Chair and Professor of Economics at McGill University, Montreal, and, effective June 1992, Dean of the Faculty of Arts. His research interests have focused on applied macroeconomics, cross-country comparisons, and Canadian economic policy and history. He is currently editing the C.D. Howe Institute's *The Canada Round*, a series of studies on the economics of Canada's constitutional crisis.

Chris Green is Professor of Economics at McGill University. His teaching and research include the fields of industrial economics and climate change. He is the author of *Canadian Industrial Organization and Policy*.

Pierre Fortin is Professor of Economics at the Université du Québec à Montréal, and Editor of *Actualité économique*. He is the author of numerous scholarly publications, and a past president of the Société canadienne de science économique. He has acted on several occasions as an advisor to the federal and Quebec governments.

Mario Polèse is Research Professor at INRS (Institut national de la recherche scientifique), Urbanisation at the Université du Québec. His research interests are in the areas of urban and regional economics. He has written numerous pieces on the evolution of the Montreal economy and acts as advisor to various levels of government on matters related to regional development policy.

Pierre-Paul Proulx, former assistant deputy minister for the Department of Regional Industrial Expansion and founder of the Forum for the Economic Development of Metropolitan Montreal, is Professor of Economics at the Université de Montréal. His areas of specializa-

tion include international economic relations, industrial organization, and Canadian and Quebec economic policy.

René Simard is Vice Rector of Teaching and Research at the Université de Montréal and Doctor *honoris causa* of the Université Paul Sabatier in Toulouse, France. He has previously served as Director of the Institut du cancer de Montreal, Chairman of the Conseil de la recherche en santé du Québec, and Chairman of the Medical Research Council of Canada.

François Vaillancourt is Professor of Economics at the Université de Montréal. He teaches and conducts research in the areas of public finance and political economy.

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Crown Life Insurance Company Limited
Hugh A. Curtis
Cyanamid Canada Inc.
John G. Davis
Shirley Dawe
Deloitte & Touche
Desjardins, Ducharme
Desmarais Family Foundation
Robert Despres
John H. Dickey
Digital Equipment of Canada Limited
William A. Dimma
Iain St. C. Dobson
Dofasco Inc.
The Dominion of Canada General Insurance Company
Domtar Inc.
Donohue Inc.
Dow Chemical Canada Inc.
Du Pont Canada Inc.
Edper Investments Ltd.
The Empire Life Insurance Company
Encor Inc.
Energy & Chemical Workers Union
H.E. English
Ernst & Young
Falconbridge Limited
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Finning Ltd.
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John McCallum and Chris Green
with Mario Polèse, Pierre Fortin, François Vaillancourt,
Pierre-Paul Proulx, and René Simard

Suppose that Quebec decides to secede from Confederation after all and that the breakup proceeds without acrimony. What would the economic consequences be for the newly sovereign state? In this study, John McCallum and Chris Green begin by examining the rise and subsequent relative economic decline of Montreal. They then turn to the short-run effects – such as higher taxes, out-migration, and reduced public services – of a friendly breakup. These, they argue, would be felt most keenly in vulnerable areas such as the Quebec dairy industry, Montreal's remaining head offices, the city of Hull, and the clothing and textiles industries. Finally, they look at the longer-run effects. These are more difficult to assess, having much to do with the broader issue of the rise and fall of nations, but the authors suggest that they could set in motion an unraveling process that could have considerable negative consequences for the Quebec economy.

McCallum and Green warn, however, that these costs are the minimum Quebecers would have to pay for separation, even if the parting were friendly. If passions dominated economic rationality and the breakup were bitter and acrimonious, the consequences would be much worse.

The study also includes comments on the main paper by five prominent francophone economists, who take issue with many of the points that McCallum and Green raise.

John McCallum is Chair and Professor of Economics at McGill University, Montreal, and the Series Editor of "The Canada Round".

Chris Green is Professor of Economics at McGill University and the author of *Canadian Industrial Organization and Policy*.

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